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MENTAL HEALTH TODAY A QUICK LOOK OF THE PICTURE!!

A recent national study of psychiatric disorders in America found that,

- Approximately 30% of adults or 70 million people were diagnosed with at least one psychiatric disorder.
- 10 million people are suffering with mood disorder and major depression
- 15 million people with Anxiety disorders.
- 1 million people with schizophrenic disorder.
- 500,000 people with eating disorder and most of them are women.

Clinical psychologists are on the front line in the treatment of these mental health problems.

WHAT IS CLINICAL PSYCHOLOGY?

Clinical psychology is an exciting and growing field that encompasses both research and practice related to psychopathology and to mental and physical health. Understanding, treating and preventing mental health problems and their associate effect is the business of clinical psychology.

Clinical psychologists play a central role in the assessment, diagnosis, treatment and prevention of mental health problems.

Through the use of psychological tests, interviews, observations of behavior, various forms of psychological treatment (e.g. cognitive behavioral therapy, interpersonal psychotherapy, marital and family therapy) clinical psychologists are on the front line in the treatment of mental health problems.

They are increasingly involved in the treatment of behavioral and psychological factors that are related to physical diseases, including cancer, heart disease, diabetes, asthma and chronic pain etc.

They are also involved in the delivery of programs to prevent mental health problems and to promote positive mental and physical health.

As a result, clinical psychologists engage in work in which the stakes are high and the opportunities are great to bring meaningful changes in the lives of others.

The word “Clinical”, derived from the Latin and Greek words for Bed, suggests the treatment of individuals who are ill. But clinical psychology has come to mean a broader area than just mental illness of individuals. Among the ultimate aims of clinical psychology are the psychological well-being and beneficial behavior of persons; therefore, it focuses on internal psychobiological conditions and on external social and physical environments within which individuals function.

Clinical psychology is the largest single specialty within psychology that deals with principles and skills applied outside the laboratory, it is by no means all of applied psychology, which includes industrial, educational, organizational, military and several other specialties.

DEFINITION OF CLINICAL PSYCHOLOGY

In a recent attempt to define and describe clinical psychology, J.H. Resnick (1991) has proposed the following definition and description of clinical psychology:

“The field of clinical psychology involves research, teaching, and services relevant to the applications of principles, methods and procedures for understanding, predicting and alleviating intellectual, emotional, biological, psychological, social and behavioral maladjustment, disability and discomfort, applied to a wide range of client population”.

OTHER DEFINITIONS OF CLINICAL PSYCHOLOGY

Clinical Psychology is a branch of psychology devoted to the study, diagnosis, and treatment of people with mental illnesses and other psychological disorders.

Clinical psychology is the scientific study, diagnosis, and treatment of people who have psychological problems adjusting to themselves and the environment. Clinical psychologists deal with both normal and abnormal behaviors. They administer and interpret psychological tests, and assist in the diagnosis and treatment of mental disorders. They also study the structure and development of personality.

Clinical psychology is a broad field of practice and research within the discipline of psychology, which applies psychological principles to the assessment, prevention, amelioration, and rehabilitation of psychological distress, disability, dysfunctional behaviors, and health-risk behaviors, and to the enhancement of psychological and physical well-being.

Clinical psychology includes both scientific research, focusing on the search for general principles, and clinical service, focusing on the study and care of clients, and information gathered from each of these activities influences practice and research.

Clinical psychology is a broad approach to human problems (both individual and interpersonal) consisting of assessment, diagnosis, consultation, treatment, program development, administration, and research with regard to numerous populations, including children, adolescents, adults, the elderly, families, groups, and disadvantaged persons.

Clinical psychology focuses on the assessment, treatment, and understanding of psychological and behavioral problems and disorders. In fact, clinical psychology focuses its efforts on the ways in which the human psyche interacts with physical, emotional, and social aspects of health and dysfunction.

According to the American Psychological Association, clinical psychology attempts to use the principles of psychology to better understand, predict, and alleviate "intellectual, emotional, psychological, and behavioral disability and discomfort" (American Psychological Association, 1981).

Clinical psychology is "the aspect of psychological science and practice concerned with the analysis, treatment, and prevention of human psychological disabilities and with the enhancing of personal adjustment and effectiveness" (Rodnick, 1985).

Thus, clinical psychology uses what is known about the principles of human behavior to help people with the numerous troubles and concerns they experience during the course of life in their relationships, emotions, and physical selves. For example, a clinical psychologist might evaluate a child using intellectual and educational tests to determine if the child has a learning disability or an attentional problem that might contribute to poor school performance. Another example includes a psychologist who treats an adult experiencing severe depression following a recent divorce. People experiencing alcohol addiction, hallucinations, compulsive eating, sexual dysfunctions, physical abuse, suicidal impulses, and head injuries are a few of the many problem areas that are of interest to clinical psychologists.

To summarize,

Clinical psychology is a broad approach to human problems (both individual and interpersonal) consisting of assessment, diagnosis, consultation, treatment, program development, administration, and research with regard to numerous populations, including children, adolescents, adults, the elderly, families, groups etc.

Clinical psychologists work with a broad range of populations, including the following: individuals (infants, children, adolescents, adults, and the elderly); couples (regardless of gender composition); families (traditional, multi- generational, and blended families); groups; organizations; and systems.

MENTAL HEALTH PROFESSIONS THAT ARE CLOSELY RELATED TO CLINICAL PSYCHOLOGY

Many people are unaware of the similarities and differences between clinical psychology and related fields, e.g. a popular question is, what is the difference between a psychologist and a psychiatrist, or between a clinical psychologist and a counseling psychologist.. Since almost all of the mental health disciplines share certain activities such as conducting psychotherapy, understanding differences between these fields can be very challenging.

Before we examine the nature of activities that are done by clinical psychologists, let us briefly review some of the other major professions in the mental health field.

Major professions in the mental health field other than Clinical Psychology include the following:

- 1. PSYCHIATRISTS**
- 2. COUNSELING PSYCHOLOGISTS**
- 3. PSYCHIATRIC SOCIAL WORKERS**
- 4. REHABILITATION PSYCHOLOGISTS**
- 5. SCHOOL PSYCHOLOGISTS**
- 6. HEALTH PSYCHOLOGISTS**
- 7. PSYCHIATRIC NURSES**
- 8. PARAPROFESSIONALS**

1. THE PSYCHIATRISTS

The psychiatrics are physicians. Psychiatry is rooted in the medical tradition and exists within the framework of organized medicine. Because of the medical training, they may prescribe medications, treat physical ailments and give physical examination.

In addition to their concentration on psychotherapy and psychiatric diagnosis, they make extensive use of a variety of medications in treating their patients' psychological difficulties. Furthermore, their medical training makes them potentially better able to recognize medical problems that may be contributing to the patient's psychological distress.

EDUCATION & TRAINING OF A PSYCHIATRIST

Specific training in psychiatry begins only after a physician receive his/her MBBS or MD degree and takes the 4 years residency training in psychiatry with further specialized training following the completion of residency.

DIFFERENCE BETWEEN A CLINICAL PSYCHOLOGIST AND PSYCHIATRIST

Before receiving psychiatric training, a psychiatrist complete four years of the medical degree and the general medical internship. In contrast to psychiatrists, a clinical psychologist typically receives no

training in medicine, receives more extensive training in human behavior and formal assessment of psychological functioning and receives extensive training in scientific research methods.

Psychiatrists often come from an authoritarian tradition. The psychiatrist is an expert who tells patients what is wrong with them and then may prescribe medication to make things right. In contrast, clinical psychologist frequently emphasizes to troubled clients their autonomy and the necessity that they, as clients, collaborate with the therapist in the change process.

Usually psychiatrists give emphasis on the use of medication in the treatment of problems. In contrast, clinical psychologist stress that client must learn to come to grips psychologically with their problems in living. Traditionally, clinical psychologists have been committed to the power of words (the talking cure) and to the process of thought and social learning. They do not subscribe to the credo of “better living through chemistry” when applied to psychological problems.

2. COUNSELING PSYCHOLOGIST

The activities of counseling psychologists overlap with those of clinical psychologist. Although both fields generally differ in philosophy, training, emphasis, and curriculum, but counseling psychology is perhaps the most similar to clinical psychology in actual practice.

Like clinical psychologist, counseling psychologists generally major in psychology as undergraduates, attend a four-year graduate training program, one-year clinical internship and complete postdoctoral training prior to obtaining their license as a psychologist.

Their principle method of assessment is usually the interview but they also do testing. Historically they have a great deal of educational and occupational counseling. More recently, many have begin to employ cognitive- behavioral techniques and even biofeedback

HOW CLINICAL PSYCHOLOGY DIFFERS FROM COUNSELING PSYCHOLOGY

The field of clinical psychology is much larger in terms of the number of doctoral- level professionals as well as the number of accredited doctoral training programs. There are approximately three times as many accredited doctoral program, producing four times as many graduates in clinical rather than in counseling, whereas counseling psychology is less large in the number of doctoral level professions and training programs.

Clinical psychologist deals with all kinds of patients (mild, moderate or severe). They are less likely to specialize in career assessment, while counseling psychologist are more likely to provide services for mildly disturbed. They are more likely to specialize in career or vocational assessment.

Clinical psychologists concentrate primarily on the treatment of severe emotional disorder. They treat their patients through psychotherapies and their most emphasis is on past, while counselors work with Persons, groups, families and systems who are experiencing situational,(mild to moderate) adjustment, and/or vocational problems. They focus more on education & changing the cognition of their client.

Clinical psychologists usually employ long-term sessions, while short term sessions are used by counseling psychologists (approximately 6-7 minimum and 14-15 maximum).

3. PSYCHIATRIC SOCIAL WORKERS

A psychiatric social worker receives a degree of Master of Social Work after two years of graduate training.

Psychiatric social workers typically conduct psychotherapy on an individual or group basis. They tend to deal with the social forces that are contributing to the patient’s difficulties. They take the case history, interview employers and relatives, and make arrangements for vocational placement of patients.

HOW PSYCHIATRIC SOCIAL WORKER DIFFERS FROM A CLINICAL PSYCHOLOGIST

Compared to the training of clinical psychologist, a psychiatric social worker's training is rather brief. The responsibilities of a psychiatric social worker are not as vast as those of clinical psychologists.

In contrast to clinical psychologists, who provide services at clinic or hospital, psychiatric social workers are more likely to visit the home, factory or the street -- the places where the patient spend the bulk of their lives.

4. REHABILITATION PSYCHOLOGISTS

Rehabilitation psychologists focus on people who are physically or cognitively disabled. The disability may result from a birth defect or later illness or injury. Rehabilitation psychologists help individuals adjust to their disabilities and the physical, psychological, social, and environmental barriers that often accompany them. Their most frequent places of employment are in rehabilitation institutes and hospitals.

5. SCHOOL PSYCHOLOGISTS

They work with school educators and others to promote the intellectual, social and emotional growth of school children. Their work is important as they deal with a new generation.

At times they have to develop programs for children who may have special needs. They also assess these children and help them based on what their needs are.

6. HEALTH PSYCHOLOGISTS

Health psychologists through their research or practice, contribute to the promotion and maintenance of good health.

They are also involved in the prevention and treatment of illness.

They may design, execute, and study programs to help people stop things like smoking, manage stress, lose weight or stay fit. Health psychologists also work in medical centers, and they also work as consultants for business and industry.

7. PSYCHIATRIC NURSES

Psychiatric nurses receive their basic training in nursing as part of two-year program to be a registered nurse.

Because psychiatric nurses spend many hours in close contact with patients, they are not only in a position to provide information about patients' hospital adjustment, but they can also play a crucial and sensitive role in fostering an appropriate therapeutic environment.

They work in close collaboration with the psychiatrists or clinical psychologists, and they (along with those they supervise - attendants, nurse's aides, volunteers, and so on) implement therapeutic recommendations.

They, cannot conduct psychotherapeutic sessions by themselves, but provide help to professionals.

xPARA-PROFESSIONALS

➤ People who are trained to assist professional mental health workers are called Paraprofessionals. They, just like psychiatric nurses, cannot conduct psychotherapeutic sessions by themselves, but provide help to professionals.

UNIQUE FEATURES OF CLINICAL PSYCHOLOGY

HOW DOES CLINICAL PSYCHOLOGY DIFFER FROM OTHER BRANCHES OF PSYCHOLOGY?

Although clinical psychology is tied to the rest of psychology through scientific research, clinical psychology is, at the same time, different from other areas of psychology.

Clinical psychology is unique specifically in its commitment to the use of psychological research to enhance the well being of individuals.

The different areas besides clinical psychology are school psychology, cognitive psychology, developmental psychology, experimental psychology, social psychology, personality psychology, industrial or organizational psychology, physiological psychology and so on.

Unlike clinical psychologist they are not mandated to complete an internship or postdoctoral fellowship.

They have different areas of expertise and skills but generally do not assess or treat patients experiencing emotional, behavioral, interpersonal or other clinical problems. In contrast clinical psychologists deal with all these problems.

They are not considered mental health professionals as clinical psychologists are, and may not even be interested in human behavior, e.g. an experimental psychologist might conduct research on the memory functioning of cats. A social psychologist might be interested in the social functioning of groups of primates. A physiological psychologist might be interested in how organisms such as snail learn new behavior. In contrast clinical psychologists deal with human behavior.

These psychologists might be interested in human behavior but not in abnormal or clinical problems.

With the exception of industrial organizational psychology, these psychologists do not obtain a license to practice psychologically and therefore do not treat clinical patients.

CONCLUSION

Clinical psychology is a broad field of practice and research within the discipline of psychology, which applies psychological principles to the assessment, prevention, amelioration, and rehabilitation of psychological distress, disability, dysfunctional behavior, and health-risk behavior, and to the enhancement of psychological and physical well-being.

In short, clinical psychology is a branch of psychology concerned with the practical application of research findings and research methodology in the fields of mental and physical health.

THE SKILLS & ACTIVITIES OF A CLINICAL PSYCHOLOGIST

WHO IS A CLINICAL PSYCHOLOGIST?

A clinical psychologist is a professional who applies principles and procedures to understand, predict and alleviate intellectual, emotional, psychological and behavioral problems”

(American Psychological Association).

PROFESSIONAL SKILLS / ACTIVITIES OF A CLINICAL PSYCHOLOGIST

The fundamental skill areas that are essential for competent functioning as a clinical psychologist within the areas of mental health include the following:

1. Assessment & Diagnosis
2. Intervention & Therapy
3. Teaching
4. Clinical Supervision
5. Research
6. Consultation
7. Program Development
8. Administration

1. ASSESSMENT & DIAGNOSIS

ASSESSMENT

Assessment has long been a critical part of the clinical psychologist’s role. Clinical psychologists most commonly administer psychological tests for the purposes of assessing a person's mental health. Assessment, whether through observation, testing or interviewing, is a way of gathering information so that an important question can be solved. Assessment of an individual's development, behavior, intellect, interests, personality, cognitive processes, emotional functioning, and social functioning are performed by clinical psychologists, as are assessment activities directed toward couples, families, and groups.

Interpretation of assessment results, and integration of these results with other information available, in a way that is sensitive to the client, and particularly clients of special populations, is an essential skill of clinical psychologists. The process of assessment is very important as it leads to the diagnosis of the client’s problem(s).

All practicing clinicians engage in assessment of one form or another. Take, for example, the following cases:

A child who is failing the fourth grade is administered an intelligence test to check if there is an intellectual deficit; a student with an undesirable behavior in class is administered a personality test to check the presence of anti-social personality traits.

Clinical psychologists also conduct detailed interviews with patients, asking questions intended to reveal signs of a psychological problem. At times, it is difficult to determine whether someone should be identified as having a psychological disorder. According to the American Psychiatric Association, a pattern of behavior or thinking is considered a psychological disorder only if

- (1) The person is experiencing significant distress or impairment,

- (2) The source of the problem resides within the person and is not a normal response to negative life events, and
- (3) The problem is not a deliberate reaction to conditions such as poverty, prejudice, or conflicts with society.

DIAGNOSIS

To formulate an effective method of treatment, clinical psychologists must not only determine that there is a problem but also must make a specific diagnosis. That is, they must identify the specific disorder or problem affecting the patient. Clinical psychologists are trained to assess, and make functional diagnoses regarding intellectual level, cognitive, emotional, social, and behavioral functioning, as well as mental and psychological disorders. For this purpose, the most widely used diagnostic scheme in the United States is the Diagnostic and Statistical Manual of Mental Disorders, a reference book published by the American Psychiatric Association. This manual contains a complete list of psychological disorders classified into 16 broad categories.

For example, panic disorder, post-traumatic stress disorder, obsessive-compulsive disorder, and phobias are grouped under the category of anxiety disorders. The manual describes the main symptoms for each disorder in concrete behavioral terms. It also gives the prevalence rates for men and women in the population; a list of predisposing factors; the normal age of onset; and the prognosis, or expected outcome.

In clinical settings, diagnoses may be made formally, using widely accepted criteria, such as the DSM IV, or informally, such as diagnosis of family dynamics using a particular theoretical model.

2. INTERVENTION & THERAPY

A major activity of clinical psychologists is intervention or treatment. Many clinical psychologists work directly with people who have a mental illness or psychological disorder. By choosing an appropriate treatment, clinical psychologists can help such people overcome their problem or, at minimum, manage their symptoms. All psychological intervention rests on the ability to develop and maintain functional therapeutic relationships with clients.

Intervention is an important skill, as clients seen by clinical psychologists are often highly distressed and sensitive. The major purpose of intervention is to empower individuals to make adaptive choices and to gain healthy control of their own lives.

All interventions require skill in the following tasks: conceptualization of the problem; formulation of a treatment plan; implementation of the treatment plan; and evaluation of the accuracy and completeness of the above mentioned tasks, as well as outcome of the intervention.

Psychotherapy is the activity that most frequently engages the typical clinician's efforts and to which the most time is devoted. The lay person often has an image of the therapy situation as one in which the client lies on a couch while the therapist, bearded and mysterious, sits behind with notepad and furrowed brow. Actually, therapy comes in many different sizes and shapes. A few therapists still use a couch, but more often the client sits in a chair adjacent to the therapist's desk.

Most often therapy involves a one- to- one relationship, but today couple's therapy, family therapy and group therapy are also very common. The therapist and client meet regularly, typically (but not necessarily) in weekly sessions, to work out the solution of the client's problems until both agree that the client has substantially improved and does not need further treatment. Although clinical psychologists cannot prescribe medication, they often combine psychotherapy with drug treatment by working in collaboration with the client's physician.

There are many different approaches to the practice of psychotherapy. Each is based on different ideas about the sources of personal problems. Most therapies can be classified as:

- Psychodynamic
- Humanistic
- Behavioral,
- Cognitive, or
- Eclectic

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3. TEACHING

Clinical psychologists who have full or part-time academic appointments obviously devote a considerable amount of time to teaching. Those, whose responsibilities are primarily in the area of graduate education, teach courses in advanced psychopathology, psychological testing, interviewing, intervention, personality theory and so on. Some also teach abnormal psychology, introduction to clinical psychology. Much of this teaching is of the familiar class-room lecture type. But a considerable amount of teaching is also done on a one-to-one, supervisory basis.

Clinical psychologists in clinical setting may also teach informal classes or do orientation works with other mental health personnel, such as nurses, aides, social worker, occupational therapist and so on. In some cases the clinician may go out into the community and lead workshops on various topics for police officers, volunteers, ministers, probation officers and others.

4. CLINICAL SUPERVISION

This activity is another form of teaching. However, it typically involves more one-to-one teaching, small group approaches, and other less formal, non class room varieties of instruction. Clinical psychologists often spend significant portions of their time supervising students, interns and others. Becoming skilled in the therapy and assessment techniques requires more than just reading textbooks. It also involves seeing clients and then discussing their cases with a more experienced supervisor. During supervision, clinical psychologists discuss the trainee's clinical cases in depth while providing therapeutic guidance as they learn psychotherapy or psychological testing skills. In short one learns by doing but under the controlled and secure conditions of a trainee-supervisor relationship.

5. RESEARCH

Clinical psychology has grown out of an academic research tradition. As a result, when clinical training programs were first established after World War II, the scientist-practitioner model was adopted. This meant that in contrast to other mental health workers such as psychiatrist or social worker, all clinicians were to be trained both as scientist and as practitioner. Although this research emphasis may not be as prominent in some training programs as it once was, the fact remains that clinical psychologists are in a unique position both to evaluate research conducted by others and to conduct their own research.

Clinical psychology research can be both basic and applied. Among the health care professions, clinical psychology is one of the few to provide extensive research training. Thus, clinical psychologists are well suited to design, implement, and evaluate research and conduct program evaluation/quality assurance programs as part of their activities.

Research is an integral activity of clinical psychologists working in academic and clinical settings. The range of research projects carried out by clinicians is enormous. Clinical studies include search for the causes of mental disorders, development and validation of assessment devices, evaluation of therapy techniques and so on. By virtue of their training in research, clinical psychologists have the ability both to consume and produce new knowledge.

6. CONSULTATION

Consultation, regardless of the setting in which it occurs, or the particular purpose it has, is a significant activity of many clinical psychologists. A growing number of clinical psychologists serve as consultants. In consultation, the goal is to increase the effectiveness of those to whom one's efforts are directed by imparting to them some degree of expertise. Consultation might involve an informal discussion, a brief report, or a more ongoing and formal consultation arrangement. It takes innumerable forms, in many different settings.

For example, companies might consult with a clinical psychologist to help reduce co-worker conflicts or provide stress management strategies for high stress employees such as business executives, fire fighters, police officers, or prison guards. Consultation might involve helping a physician to better manage patient non-compliance with unpleasant medical procedures. Consultation might also include assessment, teaching, research, and brief psychotherapy activities.

Consultation can run the gamut from clinical cases to matter of business, personnel and profit. It can deal with individuals or entire organizations. Sometimes it is remedial, other times it is oriented toward prevention.

7. PROGRAM DEVELOPMENT

Clinical psychologists are often asked to contribute to the development of treatment/evaluation programs, and should obtain appropriate supervised experience in such activities during their training. They typically work with other professionals, either directly or indirectly, who are also providing professional services to the client.

As such, clinical psychologists must be skilled in interacting with other professionals in a respectful and helpful manner to develop successful programs.

8. ADMINISTRATION

Nearly every clinical psychologist spends time on administrative tasks. For example, client records must be maintained, the clients' clinical reports must be maintained, the policies and procedures for clinical or research operations are to be developed, etc.

Some clinicians become full- time administrators. It would be difficult to list all the sorts of administrative posts held by clinical psychologists. However, here are a few examples:

Head of a university psychology department, director of a veterans administration clinic, vice president of a consulting firm, director of the clinical training program, chief psychologist in the hospital etc.

To Summarize,

We can say that, CLINICAL PSYCHOLOGY is one of the largest and most popular fields in psychology. Clinical psychologists assess and treat a wide range of psychological problems. These problems range from short-term emotional crises, such as those due to family conflicts, to severe and chronic mental illnesses, such as schizophrenia.

Some clinical psychologists specialize in treating specific problems, such as phobias or depression. Others specialize in treating specific populations, such as children, the elderly, or members of ethnic minority groups.

Clinical psychologists usually seek to treat emotional and behavioral problems with psychotherapy, a form of intervention that relies primarily on verbal communication between therapist and client. In addition, many clinical psychologists study the normal human personality and the ways in which individuals differ from one another in their patterns of thinking, feeling, behaving, and relating to others.

Still other clinical psychologists administer and interpret various kinds of psychological tests. These include personality tests, intelligence tests, and aptitude tests. These tests are routinely given in schools and businesses to assess an individual's skills, interests, and emotional functioning.

Clinical psychologists also use psychological tests to diagnose possible mental disorders. By identifying early signs of distress or mental disturbance, clinical psychologists work to promote mental health and to prevent mental disorders.

EDUCATION AND TRAINING OF A CLINICAL PSYCHOLOGIST

The road to becoming a clinical psychologist is a long one divided by a number of distinct stages and phases that include college, graduate school, clinical internship, post doctoral fellowship, licensure and finally employment, continuing education and advanced certification.

EDUCATION

GRADUATE WORK

The typical clinical psychology student in the United States completes a bachelor's degree and then five years of graduate work. It typically includes training in assessment, research, diagnosis and therapeutic skills, along with an internship.

MASTERS DEGREE PROGRAM

There are also clinical psychology programs that award the master's degree. Because of contemporary licensing laws that dictate who may practice independently as a psychologist, fewer individuals graduating from master's programs can achieve in the way of professional independence. Past evidence suggests that sub doctoral-level clinicians, are paid less, and are not perceived fully licensed to practice independently. The American Psychological Association also accepts the doctoral degree alone as the key to work as an independent professional.

PHD / PSY.D PROGRAM

A student interested in obtaining a doctorate degree in clinical psychology can choose between two types of degrees; the traditional PhD (Doctorate of Philosophy) or Psy.D (Doctorate of Psychology). Although the American Psychological Association recommends a core curriculum of courses and activities (APA 1987b), each program maintain its own unique orientation based on the faculty and the traditions of the programs.

In researching graduate programs, one will find that each program has its own unique balance on emphasizing the roles of biological, psychological and social factors in human behavior.

POST DOCTORATE

It requires 1-2 years of post doctoral training and supervision before one is eligible to take the national licensing examination. It includes clinical work as well as research, teaching and other professional activities.

Overall students interested in becoming clinical psychologists and gaining admission into quality graduate programs must take their college experience very seriously. Completing courses in psychology, research design and statistics as well as having excellent grades, GRE scores and clinical experience during the college years are very important.

CLINICAL PSYCHOLOGY EDUCATION IN PAKISTAN

To be a clinical psychologist, students have to complete Masters in Psychology (M.Sc. Psychology) from an HEC recognized university. After that they must take a specialization course in clinical practice.

It is not necessary to take a GRE test to get admission to any of the specialized clinical training programs offered within the country. An excellent GPA and a good score in entry test and interview, however, is a must.

The following specializations are being offered in Pakistan:

Advanced Diploma in Clinical Psychology (ADCP) duration: 18 months.

Masters in Clinical Psychology (M.S. Clinical) duration: 2 years.

Doctorate in Clinical Psychology (D. Clinical) duration: 2 years (after M.S. Clinical) or 3 years (after ADCP).

TRAINING OF A CLINICAL PSYCHOLOGIST

The process of training of a clinical psychologist is very long and intensive. There are disagreements among clinicians as to how to train the psychologists and in what direction the field should move. However it is useful to remember that clinical psychology is but a specialized application of the more basic core of psychology.

Within the United States, two different models of training have developed, one leading to the doctor of Philosophy (PhD). The other is the doctor of Psychology (Psy.D) degree. The basic difference between the two lies in their relative emphasis on the importance of psychological research in the training of doctoral level clinical psychologists. The predominant training philosophy in clinical psychology today is the scientist-practitioner model (leading to PhD).

COURSEWORK

Clinical students normally must take a series of basic courses such as statistics and research design, biological foundations of behavior, social psychology, developmental psychology, and cognitive psychology.

The exact number and content of these courses will vary somewhat from program to program. The intent is to give the student an understanding of the basics that underlie human behavior or that permit us to investigate that behavior.

These courses provide a strong scientific foundation for the student's clinical training and give life to the scientist-practitioner model in clinical psychology. Clinical students also enroll in several courses

that teach the fundamentals of clinical practice or deal with clinical topics at an advanced level. For example, there are often courses in psychopathology, theory and research in therapy, or principles of cognitive-behavioral interventions, or seminars in such topics as schizophrenia, methods of family and group therapy, community psychology, or neuropsychological assessment.

PRACTICUM WORK

Books and coursework are fine, but ultimately one must learn by doing. As a result, all programs seek to build the student's clinical skills through exposure to clinical practice.

The dictionary defines a practicum as “work done by an advanced student that involves the practical application of previously studied theory”. Whatever the specific form or content of the practicum experience, it is a major vehicle for the acquisition of specific clinical skills.

The student's practicum work is supervised by a clinical faculty member or by clinicians in the community who have special skills. Most psychology departments that have clinical training programs also operate a psychological clinic.

RESEARCH

The implementation of the scientist-practitioner model requires that the student develop research competency. This is accomplished through courses in statistics, computer methods, and research methodology and also by active participation in research projects. There are differences among schools as to the extent of their commitment to the scientist-practitioner approach to training. Programs that emphasize the research commitment usually see to it that research experience is not confined to the thesis and dissertation. In one department, for example, each clinical student joins the research “team” of a faculty member.

THE INTERNSHIP

The internship is a vital part of any training program. It is the capstone of the student's previous experience in clinical courses and practice and provides the experience that begins to consolidate the scientist-practitioner role. It allows the student to work full-time in a professional setting, and also in acquiring new skills.

An internship of one sort or another is required of all students in clinical programs accredited by the APA. The internship most often seems to come at the end of graduate training.

To Summarize,

Clinical psychologist's training is an essential factor to warrant professional competence. Such training is the starting point of psychologist's professional activity and has to be permanently updated. Training has to be theoretical as well as practical and must use appropriate methodology according to specific targets to be reached.

HOW A CLINICAL PSYCHOLOGIST THINKS

Although the science and the practice of clinical psychology may sound different, they are linked by a common way of thinking about people and the problems they experience. A series of four tasks are central to how clinical psychologists think about people and problems, whether in generating research and knowledge for the field as a whole or for gaining a better understanding of a given individual.

These tasks are:

1. Description,
2. Explanation,
3. Prediction, and
4. Change of human functioning.

1. Description

Accurate understanding of any individual or any psychological problem begins with a careful description of the person and the contexts in which she or he lives. In individual cases this description includes attention to the nature of the person's current functioning as well as a careful documentation of his / her prior development.

In the broader field of clinical psychology, this description includes the development of systems for classification or categorization (taxonomies) of problems that are considered the subject matter of the field, the development of sound tools for the measurement of these problems, and documentation of the prevalence of these problems.

Brian's Case; an example

Imagine that you are working as a clinical psychologist, and an adolescent is referred to you for help. Brian is 16 years old. Approximately one year ago his parents went through a very difficult divorce. Following his parents' divorce, Brian, his mother, and younger sister moved to a new town in order for his mother to begin a new job and for the family to try to "start over". Because Brian's father did not provide regular financial support, the family was faced with significant economic difficulties as they tried to get by on his mother's salary. Brian did not adjust well either to his parents' divorce or to the move to a new school and town. He had difficulty making new friends at school and became progressively more withdrawn and lonely. Three months before coming to see you, Brian became severely depressed and made a serious, but uncompleted, suicide attempt.

You are faced with a number of important questions in your initial meetings with him. Is there a specific pattern of behaviors, thoughts, or feelings that characterize the difficulties that Brian is experiencing? Are these problems unique to him, or are they similar to difficulties experienced by other people?

After some initial information has been obtained about a person, clinical psychologists must formulate a series of questions to systematically gain more information. These questions should be guided by a sound theory of human behavior and by research findings regarding the problems of the individual client.

The questions may include the following:

- What are Brian's strengths and competencies?
- In what areas of life has he been successful?
- What aspects of life are satisfying to him?
- What are his future plans (regarding his suicidal tendency)?

Answers to these questions are part of the task of developing a careful, detailed description of the scope and nature of Brian's problems, his strengths and capabilities, and the environment or context in which he lives.

Clinical science is concerned with identification of patterns of problematic behaviors, emotions, and thoughts that can be carefully and reliably documented in more than one point in time. Accurate description is dependent on tools for reliably measuring the behaviors, thoughts, and feelings of individuals. The most important observations and descriptions are those that focus on consistent patterns of problematic behaviors across individuals and within the same individual over time. For example, is Brian representative of a large group of individuals who display a similar pattern of behaviors? If it is the case, such description places Brian's problems into a broader context of the nature of depression during adolescence.

2. Explanation

Description of an individual or a psychological problem is not adequate for complete understanding of that person or problem. It is imperative that clinical psychologists develop careful models to explain how or why the problem developed, either in an individual or in people in general.

This task includes the development and testing of models of etiology or cause, including but not limited to the use of experimental methods to test causality. The explanation enterprise of psychological science and of psychological practice involves the generation of hypotheses about an individual or a problem, hypotheses that can then be carefully and rigorously tested.

Why did Brian attempt to take his life? Why has he sunk into a behavioral pattern in which he is overwhelmed by daily responsibilities and feels that he has lost control over his own life? These questions lead to an answer: "because of his parents' divorce". But this answer again leads to more general questions such as "what are the psychological consequences of the parental divorce and the losses and stresses that are associated with divorce?" and "what is the relationship between such a loss and later depression, suicidal ideation, or suicide attempts?"

The answers to these questions lie beyond information that you can obtain by examining a single case such as Brian's. Here you must turn to the broader science of psychology for an explanation of the problems that Brian is experiencing. From here, the process of research begins, that attempts to focus on all possible dimensions of the problem. For example, what are the consequences of parental separation and divorce on the psychological functioning of the children and adolescents? Are the effects of divorce long term or short term? Are there other factors (biological, environmental, etc.) associated with this problem? And so on.

The clinical psychologists develop explanations of problematic behavior using these questions as guidelines for research. They may explain psychological problems emphasizing the role of biological factors, cognitive schemas and networking, conditioning and learning processes, interpersonal relationships, and an integration of one or more of these factors.

3. PREDICTION

The most stringent and necessary test of any explanation is to see if it leads to predictions that are supported by empirical research. The importance of prediction, like description and explanation, is evident in the work of psychologists helping individuals as well as in the work of clinical researchers trying to understand a problem in the general population. Prediction is possible only through repeated observations in which conditions are either controlled or well understood.

As you treat Brian's depression, you must try to predict the course of his symptoms in the initial weeks and months of his treatment. He has made an attempt to take his own life, and you must make a judgment about the likelihood that he will make another suicide attempt. What factors would be useful

in trying to predict subsequent suicidal thinking or attempts? Even if he does not make another attempt on his life, you must make a prediction about the likely course of his current problems. Are these problems likely to continue? Will they remit on their own, or is psychological treatment or medication necessary? Are there certain psychological treatments that are likely to be effective in treating his depression?

In research, prediction is tested in two ways: (a) longitudinal studies of the course of problems as they occur in real life; and (b) experimental studies testing specific predictions or hypotheses under controlled circumstances. In both methods, the goal of clinical psychologist is to try to identify cause-and-effect relationships regarding important clinical problems.

4. CHANGE

Because clinical psychology involves the application of psychological knowledge to alleviate human problems, it is not enough for clinical psychologists to describe, explain, or predict human functioning. Clinical psychologists must also be concerned with producing change in people's lives. Specifically, clinical psychologists develop and carry out planned and controlled interventions for the treatment and prevention of psychopathology, for coping with and prevention of some forms of physical illness, and for the promotion of psychological and physiological health. Facilitating change is a goal of researchers and practicing clinicians alike.

Efforts to change people's lives must be based on research evidence that allows the clinician to make reasonable predictions about the effects of specific interventions. For example, what should you expect if you encourage Brian to discuss his feelings, including both his sense of sadness and his feelings of anger, about his parents' divorce? Is this discussion likely to lead to meaningful and lasting changes in his behavior, thoughts, and emotions? Alternatively, what is likely to happen if you systematically encourage and reward Brian for increasing his involvement in pleasant and constructive activities involving school, sports and friends? Will making changes in his behavior be sufficient to alleviate his deep feelings of loss related to his parents' divorce? And from a different perspective, it may be important to change how Brian thinks about his parents, about himself, and about the reasons for his parents' divorce. If Brian learns to think about his parents' divorce in a different way, will this new way of thinking lead to meaningful changes in his emotions and behaviors?

Clinical psychologists are concerned with developing much more than a set of techniques for helping people change. They are committed to developing a broad set of principles to understand how and why people change. Clinical psychologists are more than technicians who can follow a set of procedures designed to help a person deal with a problem or change some aspect of his or her behavior.

Clinical psychologists need to understand whether certain techniques work with some people or some problems and not others, and they need to understand the reasons that these techniques work. Without this type of comprehensive understanding of the mechanisms of how people change, psychologists cannot continue to systematically improve the ways that they can help people, and they may be unaware of ways to generalize their current methods to different people or problems.

CLINICAL PSYCHOLOGY EMPLOYMENT SETTINGS

➤Clinical psychologists are found in a number of service settings, including the following:

- General Hospitals and Medical Clinics;
- Mental Health Clinics and Psychiatric Hospitals; Rehabilitation Hospitals and Clinics;
- Community Service Agencies;
- Private Practice;
- Universities and Colleges;
- Industry;

- The Military;
- Prisons and Correctional Facilities;
- Private and Government Research Agencies; and
- Schools.

Research on the employment settings of clinical psychologists reveals that the most frequent employment setting for clinical psychologists is private practice, while the university settings are the second most common employment sites.

The following table shows the different employment sites for clinical psychologists in the United States during year 1997.

Employment Site	Percentage in Year: 1997
Psychiatric hospital	05 %
General hospital	04 %
Outpatient clinic	04 %
Community mental health center	04 %
Medical school	09 %
Private practice	40 %
University settings	19 %
Other settings	11 %

PRIVATE PRACTICE

About 40% of clinical psychologists work in solo or group private practices. As a private practitioner, the clinical psychologist offers certain services to the public, as much as a dentist or general medical doctor does.

Office hours are established and patients (i.e. clients) are seen for assessment, diagnosis and psychotherapy. Fees are charged for services rendered.

Many psychologists are drawn to independently providing direct clinical, consultation and other professional services to their clients and enjoy being their own boss and setting their own hours and policies. Research supports that, private practitioners report more job satisfaction (Norcross & Prochaska, 1983; Norcross, Karg & Prochaska 1997a) and less job stress than other psychologists.

COLLEGES AND UNIVERSITIES

About 20% of clinical psychologists are employed in academic environments (American Psychological Association, 1993a). Most of these psychologists work as Professors. They generally teach psychology courses, supervise the clinical and or research work of psychology students and conduct both independent and collaborative research.

They also typically serve on various college or university committees, providing leadership and assistance with the academic community. Some clinical psychologists work in academic clinical settings, such as student counseling centers, providing direct clinical services to students.

HOSPITALS

Many clinical psychologists work in hospital settings. They may conduct psychological testing, provide individual, family or group psychotherapy act as a consultant to other mental health or medical professionals on psychiatric or general medical hospital units, and may serve in administrative roles such as unit chief on a psychiatric ward.

Many states now allow psychologists to become full members of the medical staff of hospitals. In California, for example, psychologists are allowed to have full admitting, discharge and treatment privileges which allow them to treat their patients when they are hospitalized and to participate in hospital committees.

MEDICAL SCHOOLS

Clinical psychologists serve on the faculties of many medical schools. They typically act as “clinical faculty”, which generally involves several hours (i.e., two to four) per week of pro bono time contributed to the training of medical center trainees. These trainees might include psychiatry residents, other medical residents (e.g., pediatric residents), medical students, nursing students or non-medical hospital trainees such as psychology interns or postdoctoral fellows, social work interns, nursing students etc.

These psychologists might conduct seminars & workshops or provide individual case supervision and consultation. Psychologists may also serve as academic or research faculty at medical schools.

OUTPATIENT CLINICS

Many psychologists work in various outpatient clinics such as community mental health centers. These psychologists often provide a range of clinical services to other professionals and organizations.

For example, these psychologists might provide psychotherapy for children who have been abused or group therapy for adult substance abusers. They might also provide parent education classes. While psychologists in these settings may conduct research, direct clinical service is often the primary activity and priority of these settings.

BUISNESS AND INDUSTRY

Many clinical psychologists working in business and industry settings offer consultation services to management, assessment and brief psychotherapy to employees, and conduct research on various psychosocial issues important to company functioning and performance.

For example, these psychologists might consult with the human resource department, provide stress management workshops, or conduct interpersonal skills building workshops. Psychologists might help managers learn to improve their ability to motivate and supervise their employees. They may assist in developing strategies for interviewing and hiring job applicants.

MILITARY

Many clinical psychologists are employed by one of the branches of the military such as the Navy, Air Force, or Army. They often provide direct clinical services. Some conduct research while others act as administrators in military hospitals and clinics. Psychologists also act as civilians working in military hospitals. Typically psychologists working in the military hold an officer rank such as captain.

FORENSIC PSYCHOLOGIST (PRISON AND PROBATION SERVICES)

Forensic psychology is concerned with the behavior of individuals within the judicial and penal systems, such as offenders, victims, witnesses, judges, juries, prisoners and prison staff. Much of the work of a clinical forensic psychologist focuses on therapy in correctional settings where specific activities include:

- a) Carrying out one-to-one assessments - often to assess the risk of re-offending) or to assess the risk of suicide or self-injury;
- b) Developing and evaluating the contribution of assessment techniques such as psychometrics;
- c) Undertaking research projects to evaluate the contribution of specific service elements, policy initiatives or group program developments, e.g. exploring probation 'drop-out' rates or evaluating a group program;
- d) Participating in the delivery of, or acting as coordinating 'Treatment Manager' for, nationally recognized cognitive-behavioral group programs, e.g. Enhanced Thinking Skills or Sex Offender Treatment Program;
- e) Overseeing the training of prison/probation service staff.
- f) Dedicating time to the preparation of court reports.

OTHER LOCATIONS

➤ This category includes

- Professional schools
- Correctional facilities
- Managed care organizations
- Nursing homes
- Child and family services
- Rehabilitation centers
- School systems
- Health maintenance organizations and so on.

PROS AND CONS OF A CAREER IN CLINICAL PSYCHOLOGY

- **Some key points to consider in support of Clinical psychology:**

Personal Fulfillment Working with and helping clients can bring a great deal of personal satisfaction.

Making a Difference Unique feelings come when you see a client make changes in their lives because you have helped them.

Being Your Own Boss In private practice, clinical and counseling psychologists are often their own bosses and set their own hours.

Changing Environment Each client provides different and interesting information about himself or herself; therefore, the psychologist is rarely bored from doing routine work.

Learning Experience Clients' diagnoses and therapeutic plans tend to be at least somewhat unique, providing ongoing learning opportunities.

- **Some cautions**

The education and training is very demanding and prolonged.

There are cases when treatment may produce little or no improvement in the client's condition.

Paperwork associated with each client requires enormous care. Health insurance companies alone require a lot of detailed documentation about clients.

CONCLUSION

Clinical psychologists are unique from other mental health professionals in their provided services, service settings, populations seen, and knowledge base.

Populations Seen

Clinical psychologists work with a broad range of populations, including the following: individuals (infants, children, adolescents, adults, and the elderly); couples (regardless of gender composition); families (traditional, multi- generational, and blended families); groups; organizations; and systems.

Service Settings

Clinical psychologists are found in a number of service settings, including the following: General Hospitals and Medical Clinics; Mental Health Clinics and Psychiatric Hospitals; Rehabilitation Hospitals and Clinics; Community Service Agencies; Private Practice; Universities and Colleges; Industry; the Military; Prisons and Correctional Facilities; Private and Government Research Agencies; and Schools.

Services Provided

The typical services provided by clinical psychologists include: assessment and measurement; diagnosis; treatment; consultation; teaching and supervision; policy planning; research; program evaluation; and, administration.

Knowledge Base

The knowledge base within clinical psychology is so broad that no individual clinical psychologist can become competent in all areas of clinical psychology. Therefore, clinical psychologists must function within the specific limits of their competence (i.e., knowledge and expertise), and are expected to clearly acknowledge the limitations of their scope of practice. Clinical psychologists are responsible for referring to others (either within or outside the area of clinical psychology) when they are faced with a task outside of the limits of their knowledge and skill.

HISTORICAL OVERVIEW OF CLINICAL PSYCHOLOGY

INTRODUCTION

The history of clinical psychology, like that of many fields, is typically presented as a collection of names and dates. It is important to understand the individuals who have shaped the field of clinical psychology and to know when landmark events in the field occurred. Tracing the progression of the development of the field and the individuals who have influenced it provides an important perspective on the roots of clinical psychology as it exists today. However, the primary significance of clinical psychology's relatively short history does not lie in names and dates. Rather, its historical importance comes from an understanding of the factors that have shaped the field into its current form and the forces that are likely to influence its development in the future.

Three things are striking about the history of clinical psychology. First, many of the significant events and forces that have influenced its development have come from outside rather than from within psychology. Second, there have been significant advances in the science of clinical psychology, in some instances represented by breakthrough pieces of research, but most often through the slow and gradual accumulation of knowledge across many studies. And third, clinical psychology has emerged as a profession only recently and is still working to define its identity. More fundamental than the questions of how and when clinical psychology developed is the question of why the science and profession of clinical psychology developed so rapidly during the second half of the twentieth century.

The field came into being for two reasons. First, throughout history there has been a need to provide care and services for individuals who are experiencing psychological problems, and clinical psychology emerged in part to help meet this need. The needs of individuals with psychological problems had been addressed in very different ways over the course of history before clinical psychology stepped in to help fill this role. Second, some of the founders of scientific psychology in the late 1800s and early 1900s felt that one objective of their new science should be to contribute to the welfare of others. William James, G. Stanley Hall, and other founders of American psychology shared a belief that one of the responsibilities of the new field of psychology was to benefit human welfare in a broad sense. Thus, a societal need existed, and some members of the psychological community felt a responsibility to fill this need.

As we will point out, however, the greatest growth of clinical psychology occurred during the second half of the twentieth century, spurred by events that began during the First and Second World Wars.

EARLY APPROACHES TO MENTAL HEALTH CARE

The commitment to helping individuals in psychological distress certainly did not begin with the field of clinical psychology. The major functions that are served by clinical psychologists today (understanding and aiding individuals who are suffering from psychological disorders or are experiencing significant psychological distress) were met by other individuals and institutions in societies for centuries before the emergence of psychology as a profession. In various societies and at different points in history, who has been responsible for meeting the psychological needs of individuals has depended on how mental health and mental disorder have been viewed. Professions that have taken responsibility for the welfare of individuals who suffer from psychological or psychiatric disorders have included the clergy or other religious groups, physicians, and individuals committed to social welfare. It is important to recognize that psychologists have only recently joined these other groups in the field of mental health (Alloy, Acobson, & Acocella, 1999, Nolen-Hoeksema, 1998).

For much of recorded history, treatment of psychological problems was carried out by religious institutions. The treatment of mental health problems by religious methods is based in demonology, the view that these problems are the caused by forces of evil. Writings from the Old Testament refer to madness that is the result of punishment by God, and through-out the Middle Ages in Europe, the church was responsible for explaining the causes of psychological disturbance and providing treatment for it (most often in the form of punishment). For example, disturbed and disordered behavior that today is considered evidence of psychosis (e.g., hallucinations, delusions) used to be interpreted as evidence of possession by the devil and was treated through exorcisms, torture, or death by burning at the stake.

An alternative to demonology emerged in the form of medical explanations of psychological problems- the somato-genic perspective, during the Greek period.

THE GREEK PERIOD

Primitive Greeks viewed mental aberrations in magical and religious frame of reference. Several Greek thinkers were pivotal in the early development of integrative approaches to illness, and, thus, were precursors to a bio-psycho-social perspective.

Although the ancient Greeks felt that the gods ultimately controlled both health and illness, these thinkers looked beyond supernatural influences and explored biological, psychological and social influences on illness.

The earliest medical or biological explanation of emotional and behavioral disorders can be found in the writings of Hippocrates in the fourth century b.c.

Hippocrates believed that psychological problems, like physical illnesses, were caused by imbalances in the four bodily fluids (black bile, yellow bile, blood, and phlegm). Furthermore, Hippocrates felt that the relationship between these bodily fluids also determined temperament and personality.

Plato felt that mental illness resulted from sickness in the part of the soul that operates the head, controlling reason.

Aristotle maintained a scientific emphasis and felt that certain distinct emotional states including joy, fear, anger and courage impacted the functioning of human body.

Galen also used the humoral theory of balance between the four bodily fluids discussed previously as a foundation for treatments. He thought that humans experienced one of two irrational sub souls, one for males and one for females. He felt that the soul was the slave and not the master of the body, and that wishes of the souls in the body resulted in health and illness.

THE MIDDLE AGES

During the Middle Ages (500-1450A.D), earlier notions regarding the relationship among health, illness, mind, and body reemerged. The focus on supernatural influences to explain events became commonplace. Spiritual matters such as the influence of demons, witches and sins caused diseases and “insanity”, many believed. So healing and treatment became, once more, a spiritual rather than a medical issue.

Not every one during the middle Ages believed that good or evil spirits and demons, sorcery and witchcraft contributed to mental illness. Some thinkers, such as **Saint Thomas Aquinas** felt that there were both theological and scientific reasons of abnormal behavior.

The late 14th century French bishop **Nicholas Ores-me** felt that abnormal behavior and mental illness were due to diseases such as “melancholy” (today’s depression).

A Swiss physician, **Paracelsus**, popularized the notion that various movements of the stars, moon, and planets influenced mood and behavior. He also focused on the biological foundations of mental illness and developed humane treatments.

THE RENAISSANCE

During the renaissance, renewed interest in the physical and medical worlds emerged, overshadowing previously supernatural and religious viewpoints. Interest in the mind and soul were considered unscientific.

Morgagni discovered through autopsy that a diseased organ in the body could cause illness and death.

Andreas Vesalius emphasized scientific observation and experimentation rather than reason, mythology, religious beliefs, and dogma.

Rene' Descartes argued that the mind and body were separate. This dualism of mind and body then became the basis for Western medicine until recently.

As biological explanations for psychological problems emerged, medical professionals became involved in the identification and treatment of such disorders. Unfortunately, from the 1500s through 1800s, medical treatment of psychological problems primarily took the form of placement of individuals in psychiatric hospitals and asylums that offered little if anything in the way of treatment. Patients were held as prisoners in horrible conditions, little care or treatment was available, and even humane treatment was often lacking.

In contrast to these early approaches, more recent developments in biological explanations of psychopathology have led to major advances in diagnosis and treatment.

THE NINETEENTH CENTURY

The nineteenth century experienced numerous advances in understanding mental and physical illness, and allowed for a more sophisticated understanding of the relationship between body and mind in both health and illness.

IMPORTANT FIGURES INCLUDE

Louis Pasteur: He believed that disease and illness could be attributed to dysfunction at the cellular level.

Benjamin Rush: He authored the first American text in psychiatry, positing that the mind could cause a variety of diseases.

Franz Mesmer: He noticed that many people experiencing paralysis, deafness, and blindness had no biomedical pathology, leaving psychological causes suspect. He also promoted the idea of “animal magnetism” (also known as Mesmerism) – the view that animals possess some kind of magnetic force within their bodies that can help in the treatment of various physical and mental disorders. He believed that by directing or “Re-directing” these fluids, a physician could treat the mental illness of a person.

Philippe Pinel: He did much to improve the living conditions and treatment approaches used by mental hospitals during the nineteenth century. He wrote a book on the classification of diseases, which served as a standard medical textbook for schools of thought on clinical medicine.

In 1793, Pinel had been appointed chief physician to Bicetre, the men's "insane" asylum in Paris. What he saw there horrified him. Many of the patients were restrained to the walls by chains. Some had been in restraints this way for 30 or 40 years. He removed the chains from the patients who responded

favorably without violence. He also stopped purging, bleeding and blistering and replaced these with simple psychological treatments.

The results of these kinds of humane reforms were startling. Before Pinel, 60 percent of the mental patients at Bicetre died of disease, suicide or other causes within the first two years of admission. This number went down to 10 percent under Pinel (and went down even further as reforms continued.)

In 1795, he joined Le Salpetriere, a female asylum, where he fired the keepers who were cruel and ignorant and replaced them with personnel who were compassionate and enlightened.

Also, while there he began the practice of keeping case histories of all the patients, thereby improving their long treatment and also serving as a basis for study of the course of mental illness well into the next century.

Under Pinel, the place of residence for the mentally ill converted from a madhouse to a hospital. His reforms were soon copied all over Europe.

Clause Bernard: He was a prominent physician who argued for recognition of the role of psychological factors in physical illness.

William Tuke and Dorothea Dix worked for more humane treatment approaches in mental hospitals in United States.

Franz Alexander: He also studied the association between psychological factors and both physical and mental illnesses.

ADVANCES IN MENTAL HEALTH CARE

Only recently, and only in some cultures around the world, have psychological problems come to be viewed at least partly as the result of disturbances and problems in behavior (the psychogenic hypothesis) and, as a result, have come within the purview of psychology.

One major change in thinking about and treatment of psychological problems occurred with the advent of moral treatment in the 1800s, led by physicians and others concerned with social reform in the United States and Europe (e.g., **Philippe Pinel** in France and **Benjamin Rush** in the United States).

The moral treatment movement was based on the conviction that individuals with psychological problems deserved humane care and treatment. As part of the moral treatment movement, efforts were made to improve the inhumane conditions and methods that characterized asylums and mental hospitals at that time.

One of the most dramatic changes in the conceptualization and treatment of psychological problems occurred late in the nineteenth century with the emergence of truly psychological explanations of these problems. French physicians **Jean Charcot**, **Hippolyte Bemheim**, and **Pierre Janet** began to experiment with the use of hypnosis in the treatment of some psychological problems and introduced the notion that psychological methods of treatment could be an alternative to medical and religious approaches. Their theories led to the pioneering work of **Sigmund Freud**, an Austrian neurologist, who is perhaps the best-known proponent of psychological explanations for disorders of behavior and emotion. Freud's work has served as a base line in clinical psychology for research on the treatment of psychological problems and the actual clinical application of this research.

THE BIRTH OF PSYCHOLOGY

IN 1860, **Theodor Fechner** published **The Elements of Psychophysics** while **Wilhelm Wundt** published **The Principles of Physiological Psychology** in 1874. These publications were the first to indicate clearly that technique of physiology and physics could be used to answer psychological questions.

The **first laboratory of psychology** was subsequently developed by **Wundt** at the University of Leipzig; Germany in 1879 and with it, psychology was born.

FOUNDATION OF AMERICAN PSYCHOLOGICAL ASSOCIATION

In 1892, the American Psychological Association (APA) was founded, and **G. Stanley Hall** was elected as its first president. During the beginning months and years of its roots APA was more interested in experimental psychology as compared to Applied Psychology.

THE EMERGENCE OF CLINICAL PSYCHOLOGY WITHIN THE FIELD OF PSYCHOLOGY

As reflected in this brief history of the conceptualization and treatment of psychological problems, the origins of clinical psychology cannot be tied to a single person or event. Instead, a number of individuals responding to a variety of forces were involved in the emergence of the field in the United States and Europe in the late nineteenth and early twentieth centuries. Because clinical psychology involves the application of knowledge from the scientific study of human behavior, it is noteworthy that the science of psychology preceded the profession of psychology. This order is in contrast to many other professions in which professional practice began before the science of the field. Training in the practice of law, for example, was carried out through apprenticeship to a practicing attorney long before formal training programs in law were established in universities (Routh, 1994).

Similarly, medicine was practiced for centuries before the scientific basis of the field was fully developed. The nature of medical education and training, and indeed the entire field of medicine, was reshaped in 1910 by an influential report by Abraham Flexner (Regan-Smith, 1998). The Flexner Report called for the introduction of training in basic science as a component in all medical training and education. Prior to 1910, medical practitioners were not required to be trained in science. Clinical psychology followed the opposite path-the science of psychology was established before the application of psychology began a precedent that has led to considerable conflict within the field.

Most historians mark the origins of psychology with the development of Wilhelm Wundt's laboratory for the study of perception and behavior in Germany in the mid 1800s. Wundt was trained as a philosopher, and research conducted in his laboratory was novel in its attempt to study observable processes of human sensation and perception under relatively controlled and experimental conditions. Wundt had a major effect on American psychology through the relatively large number of Americans who received their doctoral training in his laboratory at the University of Leipzig.

The field of psychology that began to emerge in the United States in the latter part of the nineteenth century was an academic discipline committed to the scientific study of human behavior. The focus of much of the early research in psychology (e.g., examination of the characteristics of color vision) had little to do with the types of psychological problems that are the focus of clinical psychology today. Nevertheless, many pioneers of American psychology recognized that one of the important values of psychology would include its application to the effort to solve human problems.

One of the doctoral students who worked with Wundt was a young American named **Lightner Witmer**. Formal training in psychology did not exist in the United States in the late nineteenth century, and as a result. Witmer and others who were interested in the scientific study of human behavior had no choice but to leave the United States and seek their education in Europe. After receiving his doctoral degree with Wundt, Witmer returned to the United States to accept a position in the psychology department at

the University of Pennsylvania, where he could continue to conduct his research on processes of perception. The course of Witmer's work took a different turn in the spring of 1896, however, when a schoolteacher asked for Witmer's assistance in working with an otherwise bright 14-year-old boy who was having severe difficulty with spelling and recognizing written words (McReynolds, 1987, 1997).

Witmer conducted a careful evaluation of the boy's problems and developed an intensive treatment program to try to improve his reading and spelling skills. This case spurred Witmer to open the first **Psychological Clinic** in **1896** at the University of Pennsylvania, designed specifically to treat children with learning difficulties. He called for the founding of a new branch of psychology dedicated to the goal of helping people and coined the term **clinical psychology** to describe this new field.

That same year, 1896, Witmer presented his ideas about the applications of psychology to the treatment of human problems to the members of the newly formed American Psychological Association, and he received a cool rejection at best (McReynolds, 1997; Riesman, 1976). The APA members' negative response was due to several factors. Although there was some support for the application of psychological knowledge to solving human problems, the majority of psychologists considered themselves to be scientists and did not regard the role described by Witmer as appropriate for them. They did not wish to endanger their identification as scientists, which was tenuous enough in those early years, by moving their profession into what they felt were premature applications. Even if they had considered his suggestions to be laudable, few if any psychologists were trained or experienced to perform the functions Witmer proposed.

The chilly response from members of the APA is somewhat surprising given that Witmer emphasized that clinical psychology should involve the careful application of the science of psychology. Witmer used the term clinical psychology to refer to a method of teaching and research and not merely as an extension of the word clinic, a place where persons are examined. Witmer persuaded the University of Pennsylvania administration to offer formal training in clinical psychology, and its 1904-05 catalog announced that students in clinical psychology could take courses for credit in psychology and in the medical school.

By 1907, Witmer had been able to raise sufficient funds to establish a hospital school for the training of mentally retarded children as an adjunct to his clinic, and to found and serve as the first editor of a professional journal, "**The Psychological Clinic**". For his efforts, **Witmer** is now widely considered to be **the founder of clinical psychology**.

In understanding the origins of clinical psychology, it is important to consider that the first psychological clinic was dedicated to helping children with learning problems, which was a clear and logical application of the research on human learning and memory that was being conducted by psychologists at the time (e.g., Witmer, 1907/1996). Thus, the field of clinical psychology originated in an attempt to apply what was being learned in the basic science of psychology at the time.

Witmer's work influenced and anticipated future developments in clinical psychology, including an emphasis on children's academic problems, the use of active clinical interventions to improve individuals' lives, and collaboration with other professionals (such as physicians) in providing treatment (Routh, 1996).

HISTORY OF CLINICAL PSYCHOLOGY

ROOTS OF RESEARCH & ASSESSMENT IN CLINICAL PSYCHOLOGY

The evolution of the field of clinical psychology after Lightner Witmer can be best understood through an examination of how clinical psychologists came to be involved in each of four different activities:

1. Research,
2. Assessment,
3. Treatment, and
4. Prevention.

Clinical psychologists became involved in these endeavors at different points during the twentieth century and for very different reasons. It is important to comprehend the role of clinical psychologists in these four activities both to understand forces in this field's past and to anticipate changes in its future.

Likewise, it is important to possess an understanding not only of the events that shaped clinical psychology, but also of the broader social context in which the field has developed.

During the early years, clinical psychology was a science and profession dominated by males (Snyder, McDermott, Leibowitz, & Cheavens, 2000). For example, in 1917, only 13 percent of APA members were women. Although women made progress in the fields of developmental and school psychology, from 1920 through 1974 women comprised only 24 percent of graduates with doctoral degrees in clinical psychology (Snyder et al.).

By 1994, however, 58.7 percent of students admitted to doctoral programs in clinical psychology were women. Thus, the composition of clinical psychology has changed from being overwhelmingly male to being overwhelmingly female.

1. RESEARCH

HOW CLINICAL PSYCHOLOGISTS BECAME INVOLVED IN RESEARCH

Witmer and the other founders of clinical psychology were researchers who were interested in the application of their research to the benefit of others.

Clinical researchers try to add to these bodies of knowledge both to increase their understanding of psychopathology, illness, and health and to improve their methods for its treatment and prevention.

Because of their broad training in basic behavioral science, clinical psychologists are able to draw conclusions and contribute to research in a variety of different areas and to collaborate with professionals from other disciplines.

THE SCOPE OF CLINICAL PSYCHOLOGICAL RESEARCH

Clinical psychological research has steadily grown in its scope since the early 1900s. This subfield now includes:

- Research on the basic characteristics and prevalence of psychopathology. (epidemiology),
- the causes of psychopathology (etiology),
- the measurement of behavior and psychological characteristics of individuals (assessment),
- the role of the brain and central nervous system (clinical Neuropsychology),

- the treatment of psychopathology (psychotherapy),
- The prevention of psychopathology and the promotion of psychological health, and the links between psychological factors and physical health and illness (health psychology/behavioral medicine).

There has been landmark research in each of these areas during the past 70 years, the results of which led to substantial changes in knowledge about a particular problem or issue.

RESEARCHES THAT SHAPED THE FIELD

Clinical psychology has been shaped not only by findings from research studies but also by important reviews of research evidence and by the development of new methods for clinical practice.

Two examples are particularly prominent in this regard:

- 1) Effectiveness of Psychotherapy
- 2) Statistical vs. Clinical Prediction

1) EFFECTIVENESS OF PSYCHOTHERAPY

In the early 1950s, the field of psychotherapy was in its early stages of development, and much of the practice of psychotherapy was based on the psychoanalytic model developed by Freud.

Research on the effectiveness of this approach to psychotherapy was very limited, however-most practitioners simply assumed that the methods they were using were effective in treating their patients.

Given this widespread acceptance of the belief that psychotherapy was effective, a paper published in 1952 by British psychologist Hans Eysenck created enormous controversy.

Eysenck argued that there was little or no evidence that psychotherapy was any more effective than no treatment at all.

He reached this conclusion by comparing (two sources of data: the results of **24** studies that had been conducted on the outcomes of psychotherapy, and information on rates of recovery from emotional distress in the absence of treatment, or what is referred to as spontaneous remission.

Eysenck reported that treated individuals actually did worse than did people who received no psychotherapy: Whereas **72** percent of the individuals who did not receive treatment recovered from their problems, only **44** percent of those receiving psychoanalysis and **64** percent of those receiving "eclectic" psychotherapy recovered.

Although the rates of improvement presented by Eysenck are much lower than those found in many studies that have been published since the appearance of his paper, his report had a significant impact on the field.

Eysenck challenged clinical psychologists and other mental health professionals to provide better evidence for the effectiveness of their treatment methods.

Initiated by Eysenck's paper, more and better research on the effects of psychotherapy has been conducted, leading to more effective methods of treatment and a better understanding of how and why psychotherapy works. The current evidence on the effects of psychotherapy is much more positive than the perspective offered by Eysenck 50 years ago.

2) Statistical vs. Clinical Prediction

A second example of research that changed the field is a short but important book; “Statistical Versus Clinical Prediction” published by psychologist Paul Meehl in 1954 that had a significant impact on psychological testing and assessment. Before Meehl published his book, psychologists relied heavily on their subjective judgments and intuitions in interpreting the results of psychological tests.

This approach, referred to as clinical judgment or clinical prediction, was based on the assumption that clinical psychologists learn a unique set of skills that allows them to make accurate judgments about people and to predict such things as patients' ability to benefit from psychotherapy, people's potential for success in a job, or the likely course of individuals' psychological problems.

Meehl challenged these assumptions by demonstrating that judgments based on statistical data representing patterns of behavior in large samples of people provide a more accurate basis for making judgments and predictions about specific individuals than do the subjective judgments of single clinicians.

The findings reported by Meehl in 1954 still hold true today (Dawes, Faust, & Meehl, 1989; Meehl, 1997), statistically based predictions are still more accurate than clinical judgment.

CONTRIBUTION OF RESEARCH IN CLINICAL PSYCHOLOGY

Although single groundbreaking studies and commentaries have clearly important effects on the field of clinical psychology, they are relatively rare and do not represent how most of the growth and development in the field occurs. Rather, the greatest contribution of research in clinical psychology is the slow and gradual accumulation of knowledge that comes from the results of dozens of studies on a particular topic.

For example, procedures for the treatment of anxiety disorders have been developed through the efforts of a large number of different researchers who have conducted many series of carefully designed studies using a wide variety of research methods (Barlow, 1998).

These procedures include the treatment of generalized anxiety disorder, panic disorder, post-traumatic stress disorder, and specific phobias. One of the most striking features of research in clinical psychology today is the breadth of topics that are included within the field.

Throughout much of the first century of clinical psychology, three topic areas have been focal points of research:

- The nature and etiology of psychopathology;
- The reliability and validity of methods of psychological assessment, especially psychological tests; and
- Psychotherapy efficacy (whether or not psychotherapy can work) and effectiveness (whether psychotherapy actually does work in practice).

RESEARCH IN CLINICAL PSYCHOLOGY TODAY

Today, however, research in clinical psychology extends well beyond these core topics of research. Areas that clinical psychologists now investigate include:

- The role of psychological factors in the development of physical disease (e.g., cancer, heart disease),
- The relative effectiveness of psychotherapy as compared with medication in the treatment of psychopathology,
- The prevention of violent behavior,

- The long-term consequences of sexual assault, harassment and rape, and many, many other topics.

2. ASSESSMENT

CLINICAL PSYCHOLOGISTS INVOLVEMENT IN ASSESSMENT

Since its inception, psychology has been uniquely concerned with the measurement of differences between individuals on important cognitive and personality characteristics. The study of differences between individuals on psychological tests and measurements began with the work of Sir Francis Galton in England in the late 1800s.

Galton was fascinated by the work of his cousin Charles Darwin on differences in characteristics both between and within species, and in the process of natural selection that is influenced by these differences. Galton focused on the concept of individual differences between people, especially in various aspects of perception and mental abilities.

STUDY OF INDIVIDUAL DIFFERENCES

Early interest in individual difference testing in the United States is marked by the work of James McKeen Cattell at the University of Pennsylvania. Trained in Wundt's laboratory in Germany and influenced by a meeting with Galton in England, Cattell constructed tests to measure various facets of sensori-motor functioning.

As a result of these early influences, one strong thread through the history of clinical psychology is the development of tests and other procedures to assess and measure characteristics of individuals.

THE INFLUENCE OF BINET'S INTELLIGENCE TEST

BACK GROUND TO BINET'S INTELLIGENCE TEST

Around the time that Witmer was developing an application of psychology to help children who were experiencing difficulties learning in school, events in Europe were also leading to the development of methods to measure children's potential for learning.

In 1904, the Minister of Public Instruction in Paris wanted to ensure that children with limited intellectual skills were still provided with an education. Alfred Binet and Theodore Simon were commissioned by the French government to develop a tool to aid in decisions about the appropriate educational programs for French schoolchildren.

Binet was a French researcher trained in both law and medicine. In order to study individual differences, he felt it was necessary to sample a wide range of complex intellectual processes so that the spread of scores obtained by different individuals would be broad (Reisman, 1976).

Binet's work resulted in the first formal test of intelligence, the **1905 Binet-Simon scale**, consisting of 30 items of increasing difficulty.

By 1908 this original simple test had been expanded into an instrument composed of 59 tests grouped at age levels from three to thirteen years according to the percentage of children of a particular age who passed a given item (Reisman).

Interest in Binet's work grew over the next few years, and versions of the Binet-Simon scale were imported to the United States. The version that eventually became the accepted U.S. translation and standardization of the Binet-Simon scale (the **Stanford-Binet Intelligence Test**) was developed by psychologist Louis Terman of Stanford University in **1916**.

WORLD WAR I; A TEST FOR CLINICAL PSYCHOLOGY

As the United States prepared to enter the war that was raging in Europe in 1917, the American military was faced with an unprecedented task: the conscription and creation of a massive army and navy. There was an enormous need to evaluate quickly and accurately the qualifications of over 1 million young men as potential members of the armed forces (Driskell & Olmstead, 1989).

Physicians were enlisted in the task of conducting physical evaluations of these draftees to determine whether they were physically fit to serve during the war. But the military recognized the need to also evaluate the mental and intellectual qualifications of these potential soldiers. Physicians could not fill this role, because the evaluation of mental functioning was not within their realm of expertise.

Based on their knowledge of human learning and memory and the measurement of individual differences in human intelligence, psychologists were called on to fill this role. In 1917, a group of psychologists, headed by APA president Robert Yerkes, undertook the task of developing tools to measure the mental abilities of future soldiers (Driskell & Olmstead, 1989).

The psychological tests that were available and in use at the time (e.g., the test developed by Binet and Simon) required individual administration. Consequently, these tests were impractical for use with the large number of recruits involved in the military. Therefore, Yerkes and his colleagues set about the task of developing a quick and efficient test of intelligence that could be administered to large groups of individuals simultaneously.

Their effort yielded two tests,

1. The **Army Alpha** (a test of verbal skills) and
2. The **Army Beta** (a test of nonverbal skills).

The enduring consequence of this work is that it established psychologists as experts in the measurement of individual characteristics in ways that were practical and useful. This opportunity for psychology to contribute to the war through the application of psychological tests increased the status and visibility of psychologists and of psychological testing.

It is unlikely that this first large-scale application of scientific psychological knowledge and methods would have occurred without strong pressure from external sources, in this case the U.S. military.

ASSESSMENT AFTER WORLD WAR I

Following World War I, clinical psychologists became well known for their testing skills. A testing development occurred, such that by 1940 over 500 psychological tests had been produced.

These tests included both verbal and non verbal intelligence tests, career interest, personality and vocational skills tests. Tests were available for children of all ages and abilities as well as for adults.

ADVANCES IN PSYCHOLOGICAL TESTING AND ASSESSMENT

In addition to the powerful social forces that led clinical psychology to become involved in psychological assessment and testing, significant advances in research have also played an important role. For example, the publication of the Minnesota Multiphasic Personality Inventory (MMPI) by psychologist Starke Hathaway in 1943 represented a major change in the way that psychologists measured personality and psychopathology.

The MMPI relies on statistical comparisons of the test responses of an individual to those of a large sample of other people who have already been tested. These comparisons are used to determine the degree to which the individual is similar to a group of people with known personality characteristics, or

people with a specific type of psychopathology. Thus, the MMPI represented an important shift away from the more clinical, subjective approach to assessment and toward a more statistical, empirically based method of assessment.

Another important advance in assessment occurred during the 1960s with the recognition that direct observations of people's behavior might represent an important source of information, perhaps more valid than relying on their responses to psychological tests.

The first applications of behavioral observation as a means of assessment were conducted in schools and psychiatric hospitals, settings in which it was rather easy for a psychologist to observe an individual's behavior and in which the environment was relatively contained and controlled.

For example, Bijou, Peterson, Harris, Alien, and Johnston (1969) described a method for the experimental study of young children in natural settings, including their home, school, and other institutions, as well as the behavior of parents, peers, and professional workers.

In general, research has shown that behavioral observations can be conducted in a manner that is reliable (different raters independently generate similar ratings of the same individual) and that these observations can be useful in formulating and evaluating the effects of treatment.

CONCLUSION

If the development of clinical psychology had followed the path set by Witmer, Terman, and others in the early 1900s, it would have slowly emerged as a field that was based on the careful application of the young science of psychology. This is not what happened, however. Indeed, much of the rest of the history of the field is marked by decisions made by psychologists to move into new areas and new applications even though the scientific knowledge in these areas may not have been sufficient to warrant such an application.

There were often powerful social forces pressing psychologists to step forward to address an important issue or assume an important role. The results of these decisions have been far-reaching, because the field of clinical psychology has expanded at a rate that has at times challenged its scientific knowledge base and expertise.

HOW CLINICAL PSYCHOLOGISTS BECAME INVOLVED IN TREATMENT

During the period of 1850-1890s, psychologists such as Kraepelin focused on the classification of psychoses. But by the late 1800s, this focus shifted from psychoses to investigating new treatments for neurotic patients, such as suggestion and hypnosis. Specifically, Jean Charcot gained a widespread reputation for his investigations of hysterical patients. Although trained as a neurologist, Charcot employed a psychosocial approach in explaining hysteria. At about the same time, the momentous collaboration of Josef Breuer and Sigmund Freud began. In the early 1880s, Breuer was treating a young patient named "Anna O", who was diagnosed with hysteria.

Anna O's treatment presented many challenges but also led to the theoretical breakthroughs that greatly influenced the psychotherapy practice later. Based on Freud's work with Charcot and Breuer's experiences with hysterics, Breuer and Freud published *Studies on Hysteria* in 1895. This collaboration served as the launching pad for Psychoanalysis, the single most influential theoretical and treatment development in the history of psychiatry and clinical psychology.

In 1900, Freud published *The Interpretation of Dreams* that resulted in mainstream acceptance of the psychoanalytic perspective. The psychological conference at Clark University in 1906, where Freud delivered his famous lectures to American professionals and general public, stimulated the acceptance of Freud's psychoanalytic theories in United States.

For many coming years, the treatment of psychopathology was dominated by the field of psychiatry, largely because of the influence of Freud and the development of psychoanalysis as the primary method for treating psychopathology. With his training as a neurologist, it would have been natural for Freud to assume that the treatment of psychopathology was an extension of the treatment of other disorders of the nervous system and, therefore, a task best left to trained physicians. Surprisingly, it was not Freud but his followers who argued that the practice of psychotherapy should be limited to those with medical training. Consequently, the entry of psychologists into the therapy enterprise became quite difficult.

One of the earliest ways in which psychologists became involved in the treatment of psychological problems was through the child guidance movement in the early 1900s. In 1909 William Healy established a child guidance clinic in Chicago to provide services for children with psychological problems. The clinic was staffed by psychiatrists, social workers, and psychologists who treated children and adolescents, primarily for problems that are now labeled Conduct Disorder and Oppositional Defiant Disorder in the DSM-IV.

A second trend that influenced early work in interventions with children was Play therapy. Based mostly on Freud's psychoanalytic theory, psychologists conducted therapy in which children were encouraged to engage in play and the therapist would offer psychoanalytic interpretations of their play.

Group therapy also began to attract attention. By the early 1930s, the works of both J. L. Moreno and S. R. Slavson were having an impact. Another precursor of things to come was the technique of "passive therapy" described by Frederick Allen (1934). With the exception of the early work of clinical psychologists in child guidance clinics, the involvement of clinical psychologists in the treatment of psychopathology has been primarily fueled by forces from outside psychology. In much the same way that the First World War was critical in increasing the role of psychologists in assessment, the Second World War played an integral role in the emergence of clinical psychologists as providers of treatment for psychopathology.

WORLD WAR II: CLINICAL PSYCHOLOGY AND THE TREATMENT OF PSYCHOPATHOLOGY

The Second World War renewed the need for psychologists to evaluate the competencies of thousands of men and women who were being enlisted in the armed services. Psychologists were once again asked to administer psychological tests to draftees. World War II and the period that followed it are most noteworthy, however, for the emergence of a new set of skills for psychologists. Clinical observations of soldiers who had experienced the stress of combat led to the identification of a syndrome of symptoms of psychological trauma that were displayed by many soldiers. This syndrome was labeled "shell shock" or "battle fatigue" at the time, but is now known as Post Traumatic Stress Disorder (PTSD).

The primary symptoms of PTSD are high levels of anxious arousal, recurrent and persistent intrusive thoughts and emotions pertaining to the trauma, and persistent efforts to avoid all reminders and thoughts about the traumatic event. Physicians and others involved in providing medical assistance to combat soldiers noted that the symptoms could be managed most effectively if the victims were treated as quickly as possible and in the context of battle. Those soldiers for whom treatment was delayed and administered in a hospital removed from the battlefield were more likely to suffer extended and more severe reactions than those who received immediate psychological attention.

The dilemma faced by the armed services in addressing the needs of these thousands of "psychological casualties" was the insufficient number of trained individuals available to provide treatment. Medical personnel, including those physicians trained in the relatively young field of psychiatry, were needed to treat physical casualties. Psychologists were called on once again to fill a need because they were perceived as having the most representative set of skills needed for the task (StrickSand, 1986).

THE NATIONAL COUNCIL OF WOMEN PSYCHOLOGISTS

During this time the majority of people who pursued college and graduate degrees were male, and as a result, most clinical psychologists were men. However, women in psychology emerged as an important force during the Second World War (Strickland, 1988). Experimental, social, applied, and clinical psychologists all developed new respect for each other as they worked together and brought their own special skills to the military and to national defense. Interestingly, women psychologists were excluded from APA's war mobilization effort. Women within psychology founded the National Council of Women Psychologists and worked to help with community problems, such as reducing the stress of war on civilians and giving advice about child care to women who worked outside their homes during the war, many for the first time. This organization was just one example of the struggles of women to achieve equal status with men in clinical psychology.

THE VETERANS' ADMINISTRATION

The end of World War II brought rapid and dramatic changes in the field of clinical psychology. At the conclusion of the war, the armed services and the Veterans' Administration (VA) were faced with the task of providing care for more than 40,000 psychologically wounded veterans who had returned home. Too few psychiatrists were available to manage this task; consequently, the VA chose to draw on psychology as a new source of professionally trained mental health personnel. At this time, the membership of APA, including psychologists in all specializations, was barely 4,000. The VA system estimated that 4,700 clinical psychologists were needed to provide treatment for psychological casualties from World War II. To meet this need, the VA invested enormous amounts of money to pay for the training of doctoral-level clinical psychologists.

Consequently, whereas in 1946 there were no formal university programs to train clinical psychologists, by 1950 half of all PhDs in psychology were being awarded in clinical psychology.

ALTERNATIVE APPROACHES TO PSYCHOTHERAPY

The role of psychologists in conducting psychotherapy was expanded by more than just the military and VA hospitals. Carl Rogers, one of the founders of humanistic psychology, was also influential in involving psychologists in psychotherapy during this period. Rogers provided a strong impetus to move psychotherapy out of the exclusive realm of medicine, psychiatry, and psychoanalysis. While he was director of the Rochester Child Guidance Center, Rogers spearheaded an effort to loosen the hold of psychiatrists on the practice of psychotherapy, arguing that trained and qualified clinical psychologists could perform as well as medically trained analysts.

With the publication in 1942 of his book *Counseling and Psychotherapy*, Rogers not only identified psychotherapy as a legitimate activity for clinical psychologists but also offered the first model of psychotherapy that was not based on psychoanalytic theory.

THE BEHAVIORAL APPROACH

Finally, the role of psychologists in providing treatment for psychological disorders was also fueled by advances in theory and research on learning and conditioning processes that led to behaviorally oriented treatments. As models of classical conditioning and operant conditioning of behavior emerged over the course of the early and mid 1900s, psychologists began to see the potential value of these models for explaining and treating maladaptive behavior. For example, the early work of Watson, Raynor, and Jones showed the role that conditioning and learning play in the development of fears (e.g., Jones, 1924a, 1924b).

Among the first to apply behavioral models to treatment was psychiatrist Joseph Wolpe (1958), who suggested that "neurotic" behaviors (anxiety disorders) were learned through a process of conditioning and could be unlearned by a similar process, which he called "reciprocal inhibition". The principles of conditioning and learning theory were applied to treat variety of clinical problems including phobias, obsessive-compulsive disorder, anxiety and disruptive behavior in children. In 1967, Association for Advancement of Behavioral Therapy (AABT) was founded and remains one of the major professional organizations for clinical psychologists.

THE COGNITIVE – BEHAVIORAL APPROACH

The treatment focus in 1970s was on changing thoughts; feelings and expectations became important as the goal of changing overt behavior. The works of Albert Ellis using Rational Emotive Behavior Therapy, Aron Beck using Cognitive treatments for depression; and the self-efficacy work of Bandura, led to the changes in the integrative cognitive approaches with behavioral approaches.

PRESENT APPROACHES

During the late 1970s and early 1980s professionals sought to integrate the best methods of the various approaches on case-by-case basis. An emphasis was placed on the common factors leading to an **Eclectic Approach**.

Emerging in late 1900s, the **Bio-psycho-social approach** suggested that the biological, psychological and social aspects of health and illness intimately influence each other. Thus psychologists must understand the multidimensional bio-psycho-social influences in order to treat and understand others.

Psychotherapy research has been one of the most active areas of empirical investigation for clinical psychologists. We have already noted several important events in psychotherapy research, including Rogers's (1942) early research on client-centered therapy, Eysenck's (1952) critical evaluation of the effectiveness of psychotherapy, and Wolpe's (1958) work on the use of behavioral methods to treat anxiety. Other landmark studies in psycho- therapy research include the first evidence of the efficacy of

cognitive therapy in the treatment of depression (Rush, Beck, Kovacs, & Hollon, 1977), the first use of the statistical technique of meta-analysis to integrate and evaluate large numbers of different studies of the effects of psychotherapy (Smith & Glass, 1977). The first evidence that behavioral methods could be used to treat sexual dysfunction (Lobitz & LoPiccolo, 1972), and comparisons of the efficacy of various forms of psychotherapy and pharmacotherapy in the treatment of depression (e.g., Rush, Beck, Kovacs, & Hollon, 1977) and anxiety disorders (Power, Simpson, Swanson, & Wallace, 1990).

CLINICAL PSYCHOLOGISTS INVOLVEMENT IN THE PREVENTION OF PSYCHOPATHOLOGY

The treatment of psychopathology, like the treatment of any problem or disorder, can reduce the prevalence or number of existing cases of disorder. Treatment cannot, however, reduce the incidence of new cases of a disorder. That is, no matter how effective psychologists become in treating problems related to anxiety, depression, eating disorders, or substance abuse, to name but a few, the treatment of existing problems will not reduce the number of new individuals who develop these problems.

Recognition of this simple fact provided the impetus for the development of prevention efforts in public health in general and for the prevention of psychopathology in particular. Prevention of psychological problems was not an integral part of the goals of clinical psychology as the science and profession developed during the first half of the twentieth century. Beginning in the 1950s, however, a number of factors increased psychologists' awareness of the importance of prevention in dealing with mental health concerns in American society.

The report of the United States Joint Commission on Mental Illness and Health in the late 1950s, President Kennedy's initiative for new programs to combat mental retardation and psychological disorders in 1963, and the development of comprehensive community mental health centers in the 1960s were all landmark events in moving prevention into mental health programs and policies in the United States. All these initiatives highlighted the need to reduce the incidence of new cases of psychopathology. In addition, they emphasized the unequal access of Americans to mental health treatment. Individuals of lower socioeconomic status (as reflected in levels of education and occupation) have less access to mental health professionals and are less able to pay for such services because of lack of income and lack of health insurance to cover the costs of such services.

Prevention programs that can eliminate some of the social factors that contribute to the development of psychological problems may be able to eliminate some of these inequities. Clinical psychologists have played a central role in the development of prevention programs to reduce the incidence of new cases of a wide range of psychological problems and disorders. Prevention programs focus primarily on children as psychologists attempt to prevent the onset of disorders early in children's lives.

Prevention includes programs to prevent aggressive behavior and conduct disorder, depression, and substance use and abuse.

THE DEVELOPMENT OF CLINICAL PSYCHOLOGY AS A PROFESSION

As clinical psychologists have acquired new skills and roles, particularly in the areas of assessment, and treatment, psychology has needed to organize itself as a profession to monitor and regulate the activities of those who present themselves to the public as clinical psychologists. What does it mean to say that you are a clinical psychologist? What skills, competencies, and credentials must you have in order to use this label for yourself? What are the ethical and professional standards that govern psychologists' interactions with their clients? What assurances are provided to the public that the methods used by clinical psychologists have been proven to be effective?

These issues have all had to be addressed as clinical psychology has worked to define and regulate itself as a profession. The APA has played a leading role in the development and regulation of the profession

of psychology, including establishing ethical principles for the practice of psychology, accrediting training programs in clinical psychology, and working with state legislatures and the U.S. Congress to support legislation to monitor and regulate the practice of psychology. Academic research-oriented psychologists and applied psychologists have often found it difficult to integrate scientific psychology and professional psychology.

CLINICAL PSYCHOLOGY'S INTERACTIONS WITH APA

During the early part of the twentieth century, clinical and other applied psychologists complained that their interests were not being met within the APA. As a result, in 1917 fifteen of the 375 members of APA broke off to form the American Association of Clinical Psychology (AACP). With the threat of losing more members, APA reluctantly agreed to consider certifying some members as "consulting psychologists" and two years later established a special Clinical Section to handle professional issues. In the early 1930s, the New York State Psychological Association, in an attempt to deal with issues of ethics, licensing, and standardization of training, became the Association of Counseling Psychologists (ACP). In 1937, the clinical section of the APA disbanded, left the APA again, and joined ACP, which was renamed the American Association for Applied Psychology (AAAP).

This move represented a significant split between the scientific and applied aspects of psychology. In a reflection of this split, in 1939 Carl Rogers discussed the possibility of awarding professional psychologists a doctor of psychology degree (similar to the current PsyD degree) rather than a PhD. In 1939 AAAP published a model certification act for state affiliates who could use such a document in their state legislative efforts within states to gain certification or registration for psychologists.

This model certification was a major factor leading to the establishment of state boards for the licensing of psychologists. The split between scientific and applied psychology was addressed in the 1940s when APA changed its membership standards. The APA previously had required that its members must have at least two research publications beyond the dissertation. In 1945 APA was restructured in ways that were particularly supportive of practitioners, including an elimination of the requirement of publications for membership.

The impetus for this change came from the need to unify psychologists for the purpose of responding to the country's wartime needs. The APA by laws were expanded to include the advancement of psychology not only as a science but also as a profession and as a means of promoting human welfare. An arm of the APA, the Practice Directorate, is devoted specifically to issues that pertain to psychology as a profession. The Practice Directorate supports legislation that is important to psychology, conducts public education campaigns, and engages in efforts to support practicing psychologists.

FORMATION OF A NEW ORGANIZATION: THE AMERICAN PSYCHOLOGICAL SOCIETY (APS)

The tension between research and applied interests of psychology arose again in the 1980s when academic psychologists raised concerns that APA had become too involved with the practice of psychology and was ignoring psychological research. These concerns led to the formation of a new organization, the American Psychological Society (APS), in 1988. The APS is strongly committed to the promotion of scientific research in basic and applied psychology and provides an alternative for psychologists who worry that APA has become more of a guild to protect the practice of psychology in ways that are not tied to the scientific basis of the field.

The two groups function independently of one another with separate governing bodies, separate annual conventions, and separate scientific journals. However, many psychologists, and many scientifically oriented clinical psychologists in particular, are members of both organizations.

CONCLUSION

The history of clinical psychology can be traced through advances and landmark events in research, assessment, treatment, and prevention and through the development of the profession of clinical psychology. Contemporary clinical psychology is ever evolving, currently adapting to numerous changes and challenges.

Clinical psychology has now found its way into general health care with applications to numerous medical problems and issues. Although the changes in clinical psychology have been radical, the goal that binds clinical psychologists together remains the same: to apply their knowledge and skill to the mental health needs of people everywhere.

MODELS OF TRAINING IN CLINICAL PSYCHOLOGY

BACKGROUND TO THE PhD TRAINING MODEL: THE BOULDER CONFERENCE

As doctoral training in clinical psychology expanded during and following the Second World War, there was a need to regulate and monitor the type of training that students received in such programs. The American Psychological Association took the initiative to establish accreditation criteria that included course curricula, research training, qualifying examinations, and clinical training (APA Committee on Training in Clinical Psychology, 1947). Carl Rogers, the president of APA, appointed **David Shakow** to formulate a model for training in clinical psychology. Shakow recommended that training in clinical psychology should produce professionals who are well equipped to conduct research, assessment, and psychotherapy. This training should be accomplished in four years of study at the doctoral (PhD) level, including course work in psychology, psychological research, and supervised clinical practicum experiences in assessment and psychotherapy. The curriculum should include courses in research methods, core areas of psychology (e.g., biology, sociology), the psychodynamics of behavior, diagnostic (assessment) methods, and methods of psychotherapy.

Shakow proposed that the third year of training should consist of a year-long full-time internship in a clinical setting followed by a final year of training that is devoted to doctoral dissertation research. The report also recommended that master's-level training in clinical psychology should be discontinued and that the professional field should be identified only at the doctoral level.

Spurred by Shakow's report, a land mark event in the development of clinical psychology as a profession occurred with the conference on training in clinical psychology in **Boulder**, Colorado in **1949**. The outcome of this meeting, often called the **Boulder Conference**, was the formulation of a "*scientist-practitioner*" model of training for clinical psychologists. The recommendation of this meeting was that students in clinical psychology should be trained as psychologists first and practitioners second. That is, clinical psychologists were defined as individuals who are trained and skilled in both the science of psychology and the application of psychological knowledge. This two-pronged approach, still referred to as the Boulder model, has set the standards for training in clinical psychology for over 50 years.

1. THE SCIENTIST-PRACTITIONER (PhD) TRAINING MODEL

The scientist-practitioner model of training is represented in PhD clinical psychology programs. This model of training was first formally articulated in a report commissioned by the APA and chaired by David Shakow in 1947 and subsequently at a conference in Boulder, Colorado. It is typically referred to as the Boulder Model of training in clinical psychology. Students are required to develop skills both as psychological researchers and as practicing psychologists. Although the balance of these two types of training activities is rarely exactly 50-50 in any single program, all Boulder Model programs share a commitment to a relative balance of training in the science and the application of clinical psychology.

These programs are housed mostly in university-based departments of psychology that are also committed to educating undergraduates in psychology and to the graduate training of students in other areas of psychology (e.g., learning, developmental, cognitive, social). Students complete course work in basic areas of psychology and also participate in specialized seminars on topics in clinical psychology. Students are required to carry out at least two pieces of original research: a master's thesis or its equivalent and a second research project that constitutes their doctoral dissertation.

This research is usually on a topic relevant to clinical psychology and often involves applied research on the nature, measurement, etiology, prevention, or treatment of some form of psychopathology or health-related problem. In addition, students must complete a specific number of hours of training in clinical

practice (typically psychological assessment and psychotherapy) during their years in graduate school, followed by a full-year, 40-hours-per-week internship in an applied setting under the supervision of licensed clinical psychologists.

Programs that have achieved accreditation by the APA must comply with a set of guidelines regarding the types of courses and research and clinical training experiences that are required of students for completion of the degree. A typical Boulder Model program requires four years of work at a university (course work, research, clinical practica) followed by an internship in the fifth year.

THE RATIONALE FOR THE SCIENTIST- PRACTITIONER MODEL

The rationale for the balance of training in research and practice is that, regardless of the specific career they pursue, clinical psychologists will need to draw on both sets of skills. For clinical psychologists who are actively involved in research, it is essential to be able to draw on experience working with people who have clinical significant problems. This experience keeps researchers in touch with the issues and problems that are faced by such people. Without this contact with people who are suffering from psychological problems, it is too easy for researchers to select research questions and problems because they are the ones that are most easily answered, are the most fashionable in the field, or are best suited for the methodologies that are available.

Similarly, it is essential for clinical psychologists who are primarily involved in clinical practice to have a solid foundation in psychological research. Without training in research methods, practicing clinicians will be unable to stay informed of the latest developments in research concerned with psychopathology, assessment, or treatment. Clinicians need to be trained in research so that they can be educated consumers of the research advances that will emerge during the course of their career.

CRITICISM OF SCIENTIST- PRACTITIONER MODEL

Most recently, this training model came under attack by clinicians as being unrealistic in its emphasis on research in the training of clinical psychologists. The majority of clinical psychologists who are in clinical practice do not engage in research activities either due to the lack of time or lack of interest. In either way, their time spent in research training seems meaningless.

The critics also charge this model as being unresponsive to the needs of the students who aspire only to clinical practice. For example, Drabman (1985) describes students who arrive at their internship site without an adequate knowledge of how to administer, score, and interpret psychological tests. These students also sometimes show a surprising lack of experience with clinical populations. Although well versed in the technicalities of research, they have little skill in the practical application of their knowledge.

Nevertheless a majority of clinical programs still subscribe to the scientist-practitioner model in varying degrees. It is this model that differentiates clinical psychologists from the rest of the mental health pack.

BACKGROUND TO PSY.D TRAINING MODEL: THE VAIL CONFERENCE

The wisdom of trying to train clinical psychologists to be both competent scientists and practitioners was questioned vigorously in the years following the Boulder Conference. In a series of conferences and papers, some clinical psychologists argued for the need of an alternative approach to training, one that placed greater emphasis on clinical training and less emphasis on scientific training. An alternative approach emerged in 1968 when **Donald Peterson** presented the model for the first professionally oriented clinical psychology training program at the University of Illinois. His efforts culminated in another training conference, this time held in **Vail**, Colorado, in **1973**.

At this meeting there was, as expected, a reaffirmation of support for the Boulder model as one approach to the training of clinical psychologists. But a second approach, a professional model of

training, also emerged from the Vail Conference with significant support. The professional model validated the importance of knowledge of psychological research but deemphasized the importance of training in research skills for clinical psychologists.

Training programs could now receive accreditation from the APA by following either the scientist-practitioner model or the new professional model. During this time period the number of programs offering the Psy.D (doctor of psychology) degree grew rapidly, and most of the programs that offered this degree developed in freestanding professional schools of psychology; schools that were independent of universities.

This development of university-independent professional schools contributed further to the widening gap between practicing clinical psychologists and psychologists involved in basic research. Professional schools were not designed to train students in research in basic areas of psychology, and their faculties did not include researchers in these core areas. The number of clinical psychology training programs has grown rapidly in recent years, due primarily to the increase in the number of Psy.D programs.

Due to its emphasis on clinical practice, the Psy.D program is also referred to as the **“Practitioner-oriented Model of Training”**.

2. Psy.D TRAINING MODEL

Programs that grant a Psy.D degree in clinical psychology to their graduates differ from PhD programs in the balance of training devoted to research and clinical practice. Although some Psy.D programs are based in universities, most exist in separate freestanding professional schools devoted solely to the training of professional psychologists. In these programs, relatively little emphasis is given to clinical research and relatively more training is devoted to skills in psychological assessment and intervention. Although students in these programs may conduct original clinical research for their dissertation, Psy.D programs allow students an alternative to complete this requirement through other means, such as a review of the literature on a topic relevant to clinical psychology or a detailed case study.

The first of these programs was developed at the **University of Illinois in 1968**. Psy.D programs are not substantially different from PhD programs during the first two years of training. The real divergence begins with the third year. At that point, increasing experience in therapeutic practice and assessment becomes the rule. The fourth year continues the clinical emphasis with a series of internship assignments. More recently, Psy.D programs have moved toward compressing formal course work into the first year and expanding clinical experience by requiring such things as five-year practices.

THE RATIONALE BEHIND PRACTITIONER-ORIENTED (Psy.D) MODEL OF TRAINING

The rationale behind practitioner-oriented models of training is twofold. First, there is a large body of knowledge and skills that a student needs to learn to become a competent clinician, and competence in the skills needed for clinical practice requires more time than can be devoted to them in a program that emphasizes both research and practice.

Second, because most clinical psychologists do not go on to conduct research, they need relatively less training in research. Proponents of this model contend that it is no longer possible to acquire the necessary foundation of both clinical and research skills in the span of four to five years of doctoral training.

EVALUATION OF Psy.D MODEL OF TRAINING

Psy.D programs have gained an increasing foothold in the profession. Researchers such as Peterson, Eaton, Levine and Snapp (1982) hold that Psy.D practitioners are more satisfied with their graduate training and careers than are clinicians trained in traditional programs. They encounter few problems in

becoming licensed and report that the Psy.D degree is an advantage in competing for clinical positions. However, finding academic jobs is difficult for them. Further, when resources and incentives in the workplace permit, PhD graduates engage in scholarly activities more often than do Psy.D graduates.

3. PROFESSIONAL SCHOOLS

Although the Psy.D model represents a clear break with tradition, an even more radical innovation is the development of professional schools. Many of these schools have no affiliation with universities; they are autonomous, with their own financial and organizational framework. Often referred to as "free-standing" schools, these schools mostly offer the Psy.D degree. Most schools emphasize clinical functions and generally have little or no research orientation in the traditional sense. Faculty are chiefly clinical in orientation and therefore are said to provide better role models for students. The first such free-standing school was the **California School of Professional Psychology**. It was founded by the California State Psychological Association and offers several mental health degrees.

The proportion of doctorates in clinical psychology awarded by professional schools has increased dramatically: by 1993, almost half (1,107 out of 2,220, or 49.9 %) of the doctorates in clinical psychology were awarded by professional schools. These programs tend to admit far more students than traditional, university-based scientist-practitioner programs.

EVALUATION OF FREE-STANDING SCHOOLS

Whether such schools ultimately will survive is still uncertain. One of their greatest problems is stability of funding. Many such institutions must depend on tuition as their chief source of funds, which does not generate enough money to make them financially secure. They often depend heavily on part-time faculty whose major employment is elsewhere. As one consequence, it is sometimes difficult for students to have the frequent and sustained contact with their professors that is so vital to a satisfactory educational experience.

Although some professional schools are fully accredited by the APA, they are the exception rather than the rule. This is a major handicap that such schools will have to overcome if their graduates are to find professional acceptance everywhere. Recent conferences on training suggest that both PhD and Psy.D programs are secure. However, they continue to recommend that all doctorate programs be at or affiliated with regionally accredited universities.

4. CLINICAL SCIENTIST MODEL

Over the past decade, empirically oriented clinical psychologists have become increasingly concerned that clinical psychology, as currently practiced, is not well grounded in science. According to this view, many of the methods that practitioners employ in their treatment have not been demonstrated to be effective in controlled clinical studies. In some cases, empirical studies of these techniques have not been completed; in other cases, research that has been completed does not support continued use of these techniques. Similarly, the use of assessment techniques that have not been shown to be reliable and valid and to lead to positive treatment outcome has been called into action.

THE “CALL TO ACTION” FOR CLINICAL SCIENTISTS

The “call to action” for clinical scientists appeared in **1991**, in the “**Manifesto for a Science of Clinical Psychology**” (McFall, 1991). In this document, McFall argued:

1. "Scientific clinical psychology is the only legitimate and acceptable form of clinical psychology"
2. "Psychological services should not be administered to the public (except under strict experimental control) until they have satisfied these four minimal criteria:

- a. The exact nature of the service must be describe clearly.
 - b. The claimed benefits of the service must be stated explicitly.
 - c. These claimed benefits must be validated scientifically.
 - d. Possible negative side effects that out-weigh any benefits must be ruled out empirically".
3. "The primary and overriding objective of doctoral training programs in clinical psychology must be to produce the most competent clinical scientist possible".

Like-minded clinical psychologists were urged to help build a "science" of clinical psychology by integrating scientific principles into their own clinical work, differentiating between scientifically valid techniques and pseudoscientific ones, and focusing graduate training on methods that produce "clinical scientists" - individuals that "think and function as scientists in every respect and setting in their professional lives".

OUTCOME OF THE “MANIFESTO FOR A SCIENCE OF CLINICAL PSYCHOLOGY”

This document has proved to be quite provocative. One outgrowth of this model of training is the newly formed Academy of Psychological Clinical Science. The academy consists of graduate programs that are committed to training in empirical methods of research and the integration of this training with clinical training. The academy is affiliated with the American Psychological Society (APS). As of 1999, it included 43 member programs.

The **primary goals** of the academy are:

1. To foster the training of students for careers in clinical science research. Who skillfully will produce and apply scientific knowledge.
2. To advance the full range of clinical science research and theory and their integration with other relevant sciences.
3. To foster the development of and access resources and opportunities for training, research, funding, and careers in clinical science.
4. To foster the broad application of clinical science to human problems in responsible and innovative ways.
5. To foster the timely dissemination of clinical science to policy-making groups, psychologist and other scientist, practitioners and consumers.

EVALUATION OF THE CLINICAL SCIENTIST MODEL

Essentially, a network of graduate programs that adhere to the clinical science model has developed. These programs share ideas, resources, and training innovations. Further, they collaborate on projects aimed at increasing grant funding from governmental agencies, addressing state licensing requirements for the practice of psychology, and increasing the visibility of clinical science programs in undergraduate education. The ultimate success and influence of this new model of training remains to be seen.

5. COMBINED PROFESSIONAL-SCIENTIFIC TRAINING PROGRAMS

A final alternative training model involves a combined specialty in counseling clinical, and school psychology. As outlined by Beutler and Fisher (1994), this training model assumes that

- (1) These specialties share a number of core areas of knowledge.

(2) The actual practices of psychologists to graduate from each of these specialties are quite similar. The curriculum in these combined training programs focuses on core areas within psychology and exposes students to each sub specialty of counseling, clinical and school psychology.

EVALUATION OF COMBINED PROFESSIONAL-SCIENTIFIC TRAINING PROGRAMS

The combined training model emphasizes breadth rather than depth of psychological knowledge. However, this feature can also be seen as a potential weakness of the model. Graduates from this type of training program may not develop a specific sub-specialty or area of expertise by the end of their doctoral training. Further this model of training appears to be better suited for the future practitioners than for the future academician or clinical scientist. By the end of 1998 there were nine APA-accredited programs in combined professional-scientific psychology-one of which offers a Psy.D degree.

CONCLUSION

In many ways, the changes in graduate training over the past 30 years have mirrored the market place for clinical psychologists. Starting in the mid-1960s, a shift occurred from university-based academic jobs to jobs in private practice. Not surprisingly, complaints about the limitation of the scientist-practitioners model of training surfaced soon thereafter. These complaints focused primarily on the perceived inadequacy of the Boulder model of training for future practitioners according to the critics training in clinical skills was deficient and faculty members were oblivious to the training needs of future practitioners.

Out of the Vail Training Conference in 1973 came an explicit endorsement of alternative training models to meet the needs of the future practitioners. Clearly, these alternative training programs are becoming increasingly influential.

However, several recent trends may affect the viability and success of the various training models. First, some believe that there may be an over supply of practice-oriented psychologists. If true, this may ultimately affect the number of students entering and finishing graduate program in clinical psychology. In recent years, there have been many more applicants for internship position than slots available. If the internship and job market tighten, the programs that primarily train practitioners (professional schools, schools awarding the Psy.D degree) will likely feel the brunt of this effect. This will be especially true for professional schools whose economic viability is heavily dependent on tuition fees and large numbers of students.

Second, the managed health care revolution will likely affect the demand for clinical psychologist in the future as well as curriculum in training programs. More emphasis will be placed on course work involving empirically supported brief psychological interventions and focal assessment. Training programs that do not employ faculty with expertise in these areas may produce graduates without the requisite skills to compete in the market place.

Finally, several authors have noted that there may be an undersupply of academic and research-oriented clinical psychologists. If true, scientist-practitioner and clinical scientist programs may be in a better position to meet this need.

CURRENT ISSUES IN CLINICAL PSYCHOLOGY

PROFESSIONAL REGULATION

As clinical psychology grew and the number of practitioners multiplied, issues of professional competence began to arise. How is the public to know who is well trained and who is not? Many people have neither the time, inclination, nor sophistication to distinguish the professional from the charlatan. Professional regulation, therefore, has attempted to protect the public interest by developing explicit standards of competence for clinical psychologists.

CERTIFICATION

Certification is a relatively weak form of regulation in most cases. It guarantees that people cannot call themselves "psychologists" while offering services to the public for a fee unless a state board of examiners has certified them. Such certification often involves an examination, but sometimes it consists only of a review of the applicant's training and professional experience.

Certification is an attempt to protect the public by restricting the use of the title "psychologist." Its weakness is that it does not prevent anyone (from the poorly trained to outright impostors) from offering psychological services to the public.

Certification laws were often the result of effective psychiatric lobbying of state legislatures. Because many psychiatrists wanted to reserve psychotherapy as the special province of medicine, they resisted any law that would recognize the practice of psychotherapy by any non-medical specialty. As a result, certification laws were the best regulation that psychologists could obtain.

LICENSING

Licensing is a stronger form of legislation than certification. It not only specifies the nature of the title ("psychologist") and training required for licensure, it also usually defines what specific professional activities may be offered to the public for a fee. With certification, for example, individuals might call themselves "therapists" and then proceed to provide "psychotherapeutic" services with impunity.

Many state licensing laws are designed to prevent such evasions by defining psychotherapy and specifically making it the province of psychiatry, clinical psychology, or other designated professions. However, determined impostors are difficult to control, and such persons may be very clever in disguising the true nature of their activities.

To help strengthen this system of oversight and consumer protection, the American Psychological Association developed a model act for the licensure of psychologists in 1987. The American Association of State Psychology Boards (AASPB) published a more recent revision in 1992. States and provinces have used these guidelines to develop their own specific requirements for licensure in their jurisdictions. Although licensing laws vary from state to state (and province to province), there are several common requirements. These are summarized here.

SUMMARY OF TYPICAL REQUIREMENTS FOR LICENSURE

EDUCATION

A doctoral degree from an APA-accredited program in professional psychology (such as clinical) is required.

EXPERIENCE

One to two years of supervised postdoctoral clinical experience is required.

EXAMINATIONS

A candidate for licensure must pass (that is, score at or above a certain threshold score) the Examination for Professional Practice in Psychology (EPPP). In addition, some states and provinces require an oral or essay examination.

ADMINISTRATIVE REQUIREMENTS

Additional requirements include citizenship or residency, age, evidence of good moral character, and so on.

SPECIALTIES

Licensure to practice psychology is generic. However, psychologists must practice within the scope of their demonstrated competence, as indicated by their educational background and training.

Most states and provinces require applicants for licensure to sit for an examination. In addition, the licensing board usually examines the applicant's educational background and sometimes requires several years of supervised experience beyond the doctorate. Many states also have subsequent continuing education requirements. It appears that licensing boards are becoming increasingly restrictive, sometimes requiring specific courses, excluding master's candidates, and demanding degrees from APA approved programs. They are also occasionally beginning to intrude into the activities of academic and research psychologists.

ISSUES REGARDING LICENSING

Licensing and certification remain topics of intense professional interest. Some insist that licensing standards should not be enforced until research demonstrates their utility and positive client outcomes can be shown to relate to the licensee's competence (Bernstein & Lecomte, 1981).

Others have pointed out that certification and licensing are in no way valid measures of professional competence (Koocher, 1979). However, others suggest that licensing should be designed to ensure that the public will not be harmed, rather than to regulate levels of competence (Danish & Smyer, 1981). Kane (1982) reinforces this view, arguing that at the present time licensing examinations help provide safeguards against poor practice.

Finally some academic clinical psychologists are concerned that licensing requirements violate academic freedom because these requirements essentially dictate the coursework that is offered by clinical psychology programs. They argue that the faculty members involved in a clinical psychology-training program have a better idea of what coursework is needed to produce well-trained clinical psychologists.

Despite these questions and problems, the regulation of professional practice seems here to stay. To date, it is the only method we have, imperfect though it is, to protect the public from the poorly trained.

AMERICAN BOARD OF PROFESSIONAL PSYCHOLOGY (ABPP)

Because of the failure of the individual states to take the lead, the **American Board of Examiners in Professional Psychology** was established as a separate corporation in 1947. In 1968, its name was shortened to **American Board of Professional Psychology (ABPP)**.

ABPP offers certification of professional competence in the fields of behavioral psychology, clinical psychology, counseling psychology, family psychology, forensic psychology, health psychology, industrial and organizational psychology, school psychology, and clinical neuro-psychology. An oral examination is administered, the candidate's handling of a case is observed, and the clinician is asked to submit records of his or her previous handling of cases.

Candidates for the ABPP examinations must have also had five years' postdoctoral experience. Overall, requirements are more rigorous than those involved in state certification or licensing. In essence, the public can be assured that such a clinician is someone who has submitted to the scrutiny of a panel of peers.

NATIONAL REGISTER

In recent years, insurance companies have increasingly extended their coverage to include mental health services. At the same time, clinical psychologists have gained recognition as competent providers of those services involving prevention, assessment, and therapy. In 1975, the first *National Register of Health Service Providers in Psychology* was published.

The *Register* is a kind of self-certification, listing only those practitioners who are licensed or certified in their own states and who submit their names for inclusion and pay to be listed. Along with the increasing numbers of clinicians in private practice and their recognition as health care providers by insurance companies such as Blue Cross and Blue Shield, the *Register* is one more indication of the growing professionalism of clinical psychology.

ISSUES OF MANAGED HEALTH CARE

The character of health care in America changed dramatically during the 1980s and 1990s, with managed health care playing an increasingly greater role in the provision of health care to individuals and families. Under managed health care systems, decisions about an individual's health care are regulated either by companies that provide health care services or by insurance companies that underwrite the cost of services.

Traditionally, physicians treated patients simply as they saw fit, and medical insurance paid for whatever procedures the doctors ordered. The physician decided what diagnostic and treatment approaches were in the best interest of the patient, and insurance companies supported and funded the physician's discretion in making professional judgments. Lacking medical degrees, clinical psychologists could not be reimbursed by medical insurance companies.

In the 1970s, however, psychologists lobbied state legislatures to pass "freedom-of-choice" laws that would allow anyone who held a license to practice in the mental health field (e.g., psychologists, social workers) to be eligible for medical insurance reimbursement.

While physicians vigorously argued that only physicians (such as psychiatrists) should be allowed to treat patients in psychotherapy (and therefore be reimbursed by medical insurance), psychologists successfully argued that a mental health professional did not need to be a physician in order to conduct psychotherapy and other psychological services (e.g., psychological testing, consultation).

By 1983, 40 of the 50 states had passed legislation. Allowing people to obtain psychological services from any licensed mental health profession and be eligible to receive some insurance reimbursement (Nietzel, Bernstein, & Milich, 1991).

Psychology enjoyed the advantages of freedom of choice legislation for about 10 to 20 years (although this time frame varies significantly from state to state).

Psychologists, like physicians, quickly became accustomed to treating patients as they saw fit and having insurance companies reimburse them and their patients for their professional services. Thus, psychologists could offer various types of psychotherapy (e.g., psychodynamic, cognitive-behavioral, humanistic, family systems, eclectic) and various types of modalities (e.g., individual, couple, family, group) for any diagnosable problem.

Typically, insurance would reimburse 50 percent to 80 percent of the fees charged by the psychologist, and patients paid the remaining portion. With these arrangements, psychologists and patients decided on a treatment plan without input from or parameters from other parties such as insurance companies.

These private, fee-for-service insurance arrangements began to change radically during the latter part of the 1980s. Health care costs rose steadily and dramatically during the 1970s and 1980s. Significant improvements in medical technology, newer and more expensive diagnostic tools such as CAT, PET, and MRI scans, as well as newer and more expensive treatments resulted in enormous amounts of costly medical insurance claims.

Furthermore, very ill patients could live longer using these newer technologies, so costs continued to escalate for the treatment of chronic and terminal conditions. Medical education and physician salaries continued to rise as well. In fact, health care costs have increased about 2.7 times the rate of inflation in recent years (Cummings, 1995; Resnick & DeLeon, 1995).

By 1995, health care costs have increased to over one thousand billion dollars per year, accounting for about 15 percent of the gross national product (GNP) (Cummings, 1995). By 2000 health care costs will account for over 20 percent of the GNP (Resnick & DeLeon, 1995).

These escalating costs have clearly become unacceptable to insurance companies and other organizations (such as government agencies) that pay for medical services. Furthermore, it has been estimated that about 30 percent of all health care costs are for procedures that are unnecessary, ineffective, inappropriate, or fraudulent (Resnick & DeLeon, 1995).

DIAGNOSIS-RELATED GROUPS (DRGs)

In 1983 Congress passed legislation that initiated a new method of paying hospitals with a fixed and predetermined fee for treating Medicare patients. Under this plan, payment was determined by the patient diagnosis rather than by the actual total cost of treatment. Patients were categorized into **diagnosis-related groups (DRGs)**, and the costs were calculated based on the average cost per patient for a given diagnosis.

Thus, a hospital would receive a fixed fee for treating a patient with a particular diagnosis. If the hospital needed more time or money to treat the patient, monies would not be available for the additional services; or if the patient could be treated using less than the designated amount, hospitals would keep the difference to pay for other costs.

Following the advent of DRGs in the early and mid 1980s, managed health care plans such as **health maintenance organizations (HMOs)** and preferred provider organizations (PPOs) exploded onto the health care scene during the late 1980s and the 1990s. The aim of these programs was to provide a more cost-effective way to pay for health services including those services offered by mental health professionals such as clinical psychologists.

While 96 percent of people who had health care insurance still had fee-for-service plans in 1984, only 37 percent still had these plans by 1990 (Weiner & de Lissovoy, 1993). The number of Americans with fee-for-service plans continues to diminish rapidly (Cummings, 1995; B rosowski, 1995). In fact, over 35 million Americans now belong to a health maintenance organization, and about 130 million Americans are covered by some form of **managed health care** (Cummings, 1995).

HEALTH MAINTENANCE ORGANIZATIONS (HMOS)

Contrary to the traditional fee-for-service plan outlined above, an **HMO** provides comprehensive health (and usually mental health services) within one organization. An employer (or employee) pays a monthly fee to belong to the HMO. Whenever health care is needed, members obtain all their care from

the HMO for no additional cost above the monthly membership fee or a small co-payment fee (e.g., \$5 per office visit).

Patients have little or no choice regarding which doctor or other health care provider can treat them. Furthermore, they must obtain all their services (from flu shots to brain surgery) from health care professionals working at the HMO. Unlike private practitioners, these providers are paid a yearly salary rather than a certain fee for each patient they treat.

In order to be profitable, the HMO must control costs and minimize any unnecessary and expensive services. For example, Cummings (1995) reported that only 38 large HMOs "the size and efficiency of Kaiser-Permanente can treat 250 million Americans with only 290,000 physicians, half the present number, and with only 5% of the gross national product".

Thus, it is theoretically possible for physicians and organizations to provide medical services at a fraction of the cost associated with traditional fee-for-service arrangements. The important concern is whether these more efficient services are of high quality and in the best interest of patient care.

PREFERRED PROVIDER ORGANIZATIONS (PPOs)

A **Preferred Provider Organization (PPO)** is a compromise between the traditional fee-for-service and the HMO style of health care. A PPO is a network of providers who agree to treat patients affiliated with the PPO network for discounted rates. Therefore, traditional private practice professionals in all medical specialties as well as clinical psychologists and other mental health professionals can choose to apply to be on the PPO network.

Professionals in the community who have agreed to serve on the PPO panel of providers must treat a patient who is on a PPO plan. Furthermore, large health organizations such as clinics and hospitals also may apply to be on the PPO network panel. The PPO network and the providers of professional services (including hospitals) agree to set fees for various types of professional services such as surgery, office visits, and psychotherapy.

A patient who needs services may contact one of a number of hospitals, clinics, or private practice providers. Some of the services, however, still need to be authorized by the **PPO** network organization before they can be guaranteed payment. Thus permission is needed by the insurance company before many major diagnostic or treatment services can be offered by any provider on the panel.

With the advent of HMOs and PPOs, spiraling health care costs and some unnecessary procedures have been better contained. The HMO and PPO companies determine, along with the professional treating a patient, the most cost-effective and reasonable diagnostic or treatment plan to follow. Therefore the insurance companies paying for physical and mental health care services now have an important vote in the types of services that can be rendered.

EVALUATION OF HMOs & PPOs: IMPACTS OF MANAGED HEALTH CARE ON CLINICAL PRACTICE

Some arguments have been made that ultimately these changes in managed health care do not save money (Fraser, 1996). In fact, some argue that the monies going to health care have shifted from hospitals and providers to the managed care insurance industry (Matthews, 1995). Evidence that the managed-care insurance industry is one of the most profitable industries in the United States, with CEOs and other top executives enjoying salaries of over 6 million dollars per year, supports this claim (Matthews, 1995).

Generally, providers and patients are not as satisfied with these managed care programs as are those who still use the traditional fee-for-service professionals. While costs are theoretically contained in managed-care models, freedom of choice for both patient and provider is strictly controlled.

A recent survey of over 17,000 HMO patients revealed general dissatisfaction with their health plans, while patients still on the fee-for service plans expressed the most satisfaction (Rubin et al., 1993). These survey results have raised concerns about the quality of service provided by managed health care.

Managed care companies now routinely survey their members concerning client satisfaction (Broskowski, 1995). Psychologists and other mental health professionals tend to be unhappy with managed health care and have even formed special interest groups to curtail its impact and abuses (e.g., the National Coalition of Mental Health Professionals and Consumers).

A recent survey of over 14,000 members of the American Psychological Association revealed that 78 percent of the group felt that managed care had a negative impact on their professional work, with only 10.4 percent reporting a positive impact (Phelps, 1996). A survey of over 200 diplomates in clinical psychology from the American Board of Professional Psychology revealed that over 90 percent felt that managed health care was a negative and problematic trend (Plante, Boccaccini, & Andersen, in press).

In another national survey, 49 percent of 718 psychologists surveyed reported that their patients were negatively impacted by managed care that delayed or denied services while 90 percent reported that managed care reviewers interfered with appropriate treatment (Tucker & Lubin, 1994). Other surveys have demonstrated that psychologists generally feel that managed health care has requested that practitioners compromise professional ethics to contain costs (Murphy et al., 1998).

The president of the American Psychiatric Association, Harold Eist, has stated, "We are under attack by a rapacious, dishonest, disruptive, greed-driven insurance-managed care business that is in the process of decimating all health care in America, but most egregiously, the care of the mentally ill" (Saeman, 1996).

The mental health professional's deep discontent with managed-care stems from several concerns.

First, all professional decisions (such as type and frequency of therapy services) must be authorized by the managed care insurance company. The cases must go through utilization review, which means that a representative of the insurance company reviews the services and plans of the professional before authorization for services can occur.

Often the insurance agent with whom the psychologist works in this regard is not a licensed mental health professional. Therefore, many psychologists resent that they must "sell" their treatment plans to someone who is not as well trained in providing professional services.

Furthermore, many feel that these reviewers are primarily interested in minimizing costs for the insurance company rather than being concerned about what is in the best interest of the patient (Anders, 1996).

Second, concerns about patient confidentiality have arisen. Details about the patient must be disclosed in order to obtain authorization for services. Many mental health professionals (as well as patients) feel that informing the insurance company about intimate details of the patient's life and problems compromises their confidentiality. Many patients fear that this information might be misused or provided to their employer.

Third, many psychologists feel overwhelmed by the paper work that is required of managed-care providers. In addition to lengthy application forms for each separate panel to which the professional belongs (copies of malpractice insurance, license, transcripts from all professional training, updated

curriculum vitae, documentation of medical staff affiliations), other lengthy forms often need to be completed after each session with a patient.

Fourth, many psychologists resent having to accept significant reductions in their typical fees for managed care patients. For example, a psychologist might charge \$100 per hour for services, but in order to be admitted to a PPO panel, he or she might have to accept a \$65 per hour rate.

Furthermore, the additional paper work and time on the telephone for authorization and utilization review is not reimbursed.

Fifth, psychologists (and patients) often feel that too few sessions are authorized by the managed-care company (Murphy et al., 1998). For example, only 3 or 5 sessions might be authorized for services. Many psychologists feel that patients that truly need more services are being denied access to treatment (Phelps et al., 1998).

And finally, many psychologists resent having someone tell them how they should treat their patients. For example, a managed-care company might urge the psychologist to have the patient enter group rather than individual therapy in order to save costs, given the typically lower fee for group as opposed to individual treatment. Furthermore, many psychologists are concerned about the growing use of capitation methods by managed care companies.

In a capitation program, the insurance company will pay a set fee for the treatment of a given patient no matter what treatment or how many sessions are required. For example, when a managed care insurance company refers a patient to a practitioner, the company may pay \$250 for whatever services are needed. If services can be provided within 1 to 3 sessions, the practitioner covers his or her costs. If many more services are needed (e.g., 20 sessions), the professional loses a good deal of time and income.

Many managed-care companies have thus transferred the risks of expensive services from the insurance company to the practitioner. In the words of Bertram Karon, "What started reasonably is becoming a national nightmare" (Karon, 1995, p.5).

Some psychologists, however, have noted that managed care offers a variety of hidden benefits (Anonymous, 1995; Clement, 1996, Hayes, 1996). For example, justifying treatment plans to managed care companies encourages professionals to think clearly about how best to treat their patients in a cost-effective manner, to make their clinical skills sharp and motivation for success high.

Furthermore, managed care promotes interdisciplinary collaboration by forcing professionals to work with other professionals (such as physicians) also treating a given patient as well as with professionals representing the managed-care company. Finally, managed health care demands that professionals be held more accountable for everything they do and for the price of their services. These changes have encouraged psychologists and other professionals to use empirically validated treatment approaches as well as brief, problem-focused treatments.

PRESCRIPTION PRIVILEGES FOR CLINICAL PSYCHOLOGISTS

A highly controversial issue facing clinical psychology is the possibility of obtaining the legal and professional ability to prescribe psychotropic medications. Historically, psychiatrists have been the only mental health professionals legally allowed to prescribe medication for their patients. Curiously, however, any physician from any specialty area (e.g., cardiology, urology, internal medicine) may legally prescribe psychotropic medications even if the physician lacks mental health training or experience.

In fact, the majority (approximately 80%) of psychotropic medications prescribed to alleviate anxiety and depression are prescribed by general family practice or internal medicine physicians and not by

psychiatrists (DeLeon & Wiggins, 1996). Although a number of psychologists actively conduct research on the neurobiology and psychopharmacology of behavior, and approximately two-thirds of graduate training programs in psychology offer psychopharmacology courses to their students (Popanz, 1991), psychologists have not obtained legal permission to prescribe medications to the public.

The American Psychological Association, after careful study, has supported efforts to develop a curriculum to adequately train psychologists in psychopharmacology and to lobby state legislative groups to pass laws allowing psychologists to prescribe medications (American Psychological Association, 1992b; Cullen, 1998; Martin, 1995; Smyer et al., 1993). During the past several decades, there has been an explosion of research on the effects of various medications on psychiatric problems such as anxiety, depression, impulsivity, and thought disturbance.

New and effective medications have become available to assist those experiencing a wide range of emotional and behavioral problems. For example, the development and popularity of Prozac has led numerous people to become interested in using the drug to combat depression and other problematic symptoms such as bulimia. Additionally, the influence of alcohol, cocaine, nicotine, and other substances on behavior (such as substance abuse, domestic violence, and crime) continues to be a major issue for all health care and mental health professionals.

These substance abuse problems are often treated with medications such as ant-abuse for alcohol addiction and methadone for heroine addiction. Advances in the development and availability of psychotropic medication as well as the influence of substance use and abuse on behavior have set the stage for the controversial issue of the development of prescription privileges for psychologists.

Furthermore, as more integrative and bio-psychosocial perspectives replace traditional one-dimensional theoretical models (e.g., psychodynamic, behavioral) of diagnosis and treatment, biological and medication issues become increasingly relevant for practicing psychologists.

OPPOSITION FROM OTHER PROFESSIONS

A prescription privilege for psychologists is a hotly debated topic both within and outside the profession. For example, both the American Medical Association and the American Psychiatric Association are adamantly opposed to allowing psychologists the privilege of prescribing medication (American Medical Association, 1984). A recent survey of approximately 400 family practice physicians revealed strong opposition to psychologists obtaining prescription privileges (Bell, Digman, & McKenna, 1995). They claim that a medical degree is necessary to competently administer medications that deal with the complexities of mind-body interactions.

OPPOSITION FROM WITHIN PSYCHOLOGY

Even within psychology, many are opposed to having psychologists prescribe medication for their patients (DeNelsky, 1991, 1996; Hayes & Heiby, 1996). Some psychologists are adamantly opposed to prescription privileges (DeNelsky, 1996). Some are concerned that allowing psychologists to prescribe medication would distract them from their traditional focus on non-biological emotional and behavioral interventions (e.g., psychotherapy, education etc.).

Some have argued that by obtaining prescription privileges psychology would lose its unique identity and psychologists would become "junior psychiatrists" (DeNelsky, 1996; Lorion, 1996). Finally, many are concerned about the practical problems associated with prescription privileges such as sizable increases in the costs of malpractice insurance or the increased influence of pharmaceutical companies on the field of psychology (Hayes & Hieby, 1996).

On the other hand, many have argued for the development of prescription privileges for psychologists. A number of clinical psychologists support prescription privileges. Furthermore, about half of all

graduate students in clinical psychology wish to be able to prescribe medication with the majority wanting the option available for the profession (Smith, 1992).

Proponents argue that with appropriate and intensive training for those who wish to prescribe medications, psychologists would be excellent candidates to provide psychotropic medications for patients, including the underserved populations (e.g., the elderly, the military, people with low socioeconomic status, and people who live in rural areas) who have little opportunity to be treated by a psychiatrist (Brentar & McNamara, 1991; DeLeon & Wiggins, 1996; Smith, 1992).

Many point out that other non-physicians (e.g., nurse practitioners, optometrists, podiatrists, dentists) already have the appropriate training and legal authority to prescribe a limited array of medications. In fact, nurse practitioners have prescription privileges in 49 states, physician assistants can legally prescribe medication in 40 states, and optometrists can prescribe medication in all 50 states (DeLeon & Wiggins, 1996).

Because medical schools in the United States typically spend only an average of 104 hours of classroom instruction on pharmacology (Association for Medical School Pharmacology, 1990), psychologists have argued that obtaining a medical degree is not necessarily needed to prescribe medications if sufficient and specific training is available.

Despite the advantage of no longer having to send patients to other professionals for medication, psychologists generally tend to have mixed feelings about obtaining prescription privileges and thus are not uniformly in favor of it (e.g., Boswell & Litwin, 1992; DeNelsky, 1996; Evans & Murphy, 1997; Hayes & Heiby, 1996; Plante et al., 1997).

BACKGROUND: As noted by Brentar and McNamara (1991), clinical psychologists in recent years have expanded their area of interest from mental health to health issues in general. This redefinition of clinical psychology' as a field concerned with general health (including mental health) raises a number of interesting issues regarding how best to ensure that clinical psychologists can function autonomously and not be controlled or regulated by medical or other professions (Fox, 1982).

Several advocates have argued that obtaining prescription privileges will ensure the autonomy of clinical psychologists as health service providers and will enable a continuity of care that is missing when a psychiatrist prescribes the patient's medications and a psychologist provides the same patient's psychotherapy.

Further, DeLeon (1988) has argued that it is our professional and ethical duty to improve and broaden the services we offer so that society's needs can be met. Clinical psychologists with prescription privileges would be available to meet the needs of underserved populations (for example, rural residents, geriatric patients).

However, the pursuit of prescription privileges has been questioned on philosophical grounds. Handler (1988) has argued that the need for professional boundaries between clinical psychology and psychiatry dictates that we should not incorporate medical interventions (medications) into our treatment repertoire. Handler further asserts that it is clinical psychology's non-medication orientation that identifies it as a unique health profession and that is responsible for the field's appeal. DeNeisky (1991, 1996) notes that, even without prescription privileges, more and more psychologists have become providers of outpatient services, whereas the opposite trend is true for psychiatry.

PROS AND CONS OF PRESCRIPTION PRIVILEGES

Following are some of the major arguments for and against prescription privileges.

PROS

A number of arguments have been made In favor of seeking prescription privileges; we will briefly present several of the most commonly cited reasons. These arguments were discussed in a 1995

interview with the executive director of the Practice Directorate of the American Psychological Association (Nickelson, 1995) and have been emphasized by others advocating prescription privileges (for example, DeLeon & Wiggins, 1996).

First, having prescription privileges would enable clinical psychologists to provide a wider variety of treatments and to treat a wider range of clients or patients. Treatment involving medications would now be an option, and this would lead to more involvement by clinical psychologists in the treatment of conditions in which medications are the primary form of intervention (for example, schizophrenia).

A second advantage of having prescription privileges is the potential increase in efficiency and cost-effectiveness of care for those patients who need both psychological treatment and medication. These individuals often enlist more than one mental health professional (a psychiatrist for medications, a clinical psychologist for cognitive-behavioral treatment). A single mental health professional who could provide all forms of treatment might be desirable from both a practical and an economic standpoint.

There is also the belief that prescription privileges will give clinical psychologists a competitive advantage in the health care marketplace. The health care field is becoming increasingly competitive, and prescription privileges would provide an advantage to clinical psychologists over other health care professionals (such as social workers).

Finally, some view obtaining prescription privileges as a natural progression in clinical psychology's quest to become a "full-fledged" health care profession, rather than just a mental health care profession.

CONS

Other clinical psychologists have voiced concerns about the possibility of obtaining prescription privileges (including Brentar & McNamara, 1991; DeNeisky, 1991, 1996; Handler, 1988; Hayes & Heiby, 1996).

These critics point out that prescription privileges may lead to a de-emphasis of "psychological" forms of treatment because medications are often faster-acting and potentially more unsafe. Many fear that a conceptual shift may occur, with biological explanations of emotional conditions taking precedence over psychological ones.

The pursuit of prescription privileges may also damage clinical psychology's relationship with psychiatry and general medicine. Such conflict may result in financially expensive lawsuits. This new financial burden, as well as the legal fees necessary to modify current licensing laws, would come at the expense of existing programs. In addition, the granting of prescription privileges would likely lead to increases in malpractice liability costs. In short, it may not be worth it.

MEDICAL STAFF PRIVILEGES

Historically, only physicians were allowed to treat patients independently in a hospital setting and serve on the medical staff of a hospital. **Medical staff privileges** allowed a physician to admit and discharge patients as needed as well as organize or manage the treatment plan of patients while hospitalized.

Therefore, if a psychologist was treating a patient in an outpatient environment (such as a community mental health clinic or in private practice) who then later required hospitalization, the psychologist would have to turn the hospital portion of the care over to a physician (such as a psychiatrist), who would admit, discharge, and direct treatment.

The psychologist would be allowed to see the hospitalized patient only as a visitor, just like family members) and not as a professional. The psychologist also could not offer treatment services (such as psychotherapy) while the patient was in the hospital setting.

Psychologists have been interested in obtaining medical staff privileges to provide independent inpatient care for their patients. Many psychologists feel that physicians (such as psychiatrists) do not need to supervise their work in hospital settings. Physicians, however, have generally opposed medical staff privileges for psychologists (American Medical Association, 1984).

After about 10 years of legislative advocacy and activity, approximately 16 percent of clinical psychologists have obtained full medical staff privileges in the United States. Yet, many hospital-affiliated psychologists continue to struggle to maintain autonomous status within hospital settings.

In **1978**, legislation was passed allowing psychologists to be able to obtain medical staff privileges independently in California. However, many hospitals and physician groups fought the legislation. A past president of the American Psychiatric Association stated that it was a "dangerous trend" for psychologists to obtain hospital staff privileges (Fink, 1986, p.816).

ISSUES IN PRIVATE PRACTICE

The number of clinical psychologists choosing to work in full-time or part-time **private practice** has grown steadily in the past several decades. Currently, about 35 percent to 40 percent of clinical psychologists primarily work in solo or group private practices.

Over two-thirds of clinical psychologists maintain at least some part-time private practice activities. This proportion represents a 47 percent increase since 1973 (Garfield & Kurtz 1974 Norcross et al., 1989, 1997).

While survey results have revealed a larger and larger percentage of clinical psychologists conducting at least part-time private practice activities, experts generally now predict that this trend will quickly reverse itself owing to the rapid changes in the health care delivery and insurance reimbursement systems.

For example, a recent survey of over 15,000 members of the American Psychological Association revealed that over 40 percent of practitioners who obtained their license prior to 1980 were working in solo independent practice, compared with only about 30 percent of those who obtained their license after 1990. Managed health care has made it increasingly difficult to develop and maintain an independent practice in clinical psychology.

In the words of Russ Newman, director of the Practice Directorate of the American Psychological Association, "It is going to be very difficult to continue as a solo practitioner in the integrated marketplace of the future". Managed-care companies, in their efforts to provide cost-effective services, have looked to master's-degree trained counselors as a lower cost alternative to clinical psychologists. Furthermore, the companies are less likely to pay for services that have been traditionally an integral part of a psychologist's independent practice (e.g., long-term insight-oriented psychotherapy).

RECENT TRENDS IN PRIVATE PRACTICE

Traditional, fee-for-service private practice is a thing of the past (R. J. Resnick, 1997; Schneider, 1990); managed health care now dominates the scene. Private practice psychologists have felt the brunt of this change. However, training programs must ensure that future clinical psychologists are not sent out into the real world lacking the requisite skills and knowledge demanded by managed health care systems.

CONCLUSION: CURRENT ISSUES IN CLINICAL PSYCHOLOGY

Clinical psychology is changing and growing at a rapid pace. Some of these changes are very positive; some clearly negative. On the positive side, psychology has greatly contributed to a better understanding of human behavior and ways to improve the quality of life for many. Assessment, treatment, research, teaching, and consultation are all much more effective today than in the past.

Psychology has also attained increasing independence as a discipline. Licensing laws, medical staff privileges, prescription privileges, and freedom of choice legislation have all contributed to the development of psychology as a respected independent profession. As the profession and field has matured, a more in-depth and sophisticated understanding of human behavior has unfolded. Unfortunately, however, the trend toward managed health care and further constraints in funding for research and practice potentially threaten the growth and types of services psychology can provide. In addition, sizable increases in the number of students being trained as psychologists, especially at large free standing professional schools of psychology, may intensify competition for available job positions.

Despite the challenges confronting this as well as all related fields, clinical psychology as a profession remains a fascinating and exciting endeavor with a tremendous potential to help individuals, groups, and society in the course of a truly fulfilling professional career. Although the future of clinical psychology is uncertain, it is likely to continue to be a rewarding career for many. Future clinical psychologists must be flexible to adapt to changing needs and requirements as society and the discipline evolves and changes.

ETHICAL STANDARDS FOR CLINICAL PSYCHOLOGISTS

Whether a psychologist is a researcher, teacher, therapist, or administrator, he or she is expected to maintain the highest professional ethics in all professional activities at all times. In fact, psychology is one of the few fields that have adopted ethical guidelines that hold members to a much higher standard than the law. It is especially important for the field of psychology to focus on professional ethics since psychologists generally have a high degree of responsibility that often significantly impacts the lives of others. For example, clinical psychologists who conduct psychotherapy are entrusted with the emotional and often physical vulnerabilities, confidences and well-being of the people who seek their guidance. Clinical psychologists who are teachers or professors are called upon to provide objective, state-of-the-art, and unbiased information to their students. Clinical psychologists conducting research must design and conduct high quality research, protect the rights of subjects, and carefully interpret and report their results in order to contribute meaningful information and knowledge about human behavior to the professional community. Thus, clinical psychologists must closely and carefully follow ethical principles to ensure that they behave in an appropriate, responsible, and professional manner protecting the public as well as the profession.

RATIONALE

What are the ethical guidelines for psychologists? How exactly should a psychologist behave? How can a psychologist be sure that he or she is behaving appropriately? While certain behaviors seem easy to recognize as unethical such as sexual contact with current patients, falsifying research data or records, breaking patient confidentiality, and over-billing, many other behaviors may not be so clear. The Ethics Code has been updated nine times by the American Psychological Association since the original 1953 document was published. This current version of the APA Ethics Code was adopted by the American Psychological Association's Council of Representatives during its meeting, August 21, 2002, and is effective beginning June 1, 2003.

INTRODUCTION AND APPLICABILITY

The American Psychological Association's (APA's) Ethical Principles of Psychologists and Code of Conduct (hereinafter referred to as the Ethics Code) consists of an Introduction, a Preamble, five General Principles (A - E), and specific Ethical Standards. The Introduction discusses the intent, organization, procedural considerations, and scope of application of the Ethics Code. The Preamble and General Principles are aspirational goals to guide psychologists toward the highest ideals of psychology. Although the Preamble and General Principles are not themselves enforceable rules, they should be considered by psychologists in arriving at an ethical course of action. The Ethical Standards set forth enforceable rules for conduct as psychologists. Most of the Ethical Standards are written broadly, in order to apply to psychologists in varied roles, although the application of an Ethical Standard may vary depending on the context.

This Ethics Code applies only to psychologists' activities that are part of their scientific, educational, or professional roles as psychologists. Areas covered include but are not limited to the clinical, counseling, and school practice of psychology; research; teaching; supervision of trainees; public service; policy development; social intervention; development of assessment instruments; conducting assessments; educational counseling; organizational consulting; forensic activities; program design and evaluation; and administration. This Ethics Code applies to these activities across a variety of contexts, such as in person, postal, telephone, internet, and other electronic transmissions.

Membership in the APA commits members and student affiliates to comply with the standards of the APA Ethics Code and to the rules and procedures used to enforce them. Lack of awareness or

misunderstanding of an Ethical Standard is not itself a defense to a charge of unethical conduct. APA may impose sanctions on its members for violations of the standards of the Ethics Code, including termination of AP membership, and may notify other bodies and individuals of its actions.

If this Ethics Code establishes a higher standard of conduct than is required by law, psychologists must meet the higher ethical standard. If psychologists' ethical responsibilities conflict with law, regulations, or other governing legal authority, psychologists make known their commitment to this Ethics Code and take steps to resolve the conflict in a responsible manner. If the conflict is irresolvable via such means, psychologists may adhere to the requirements of the law, regulations, or other governing authority in keeping with basic principles of human rights.

PREAMBLE

Psychologists are committed to increasing scientific and professional knowledge of behavior and people's understanding of themselves and others and to the use of such knowledge to improve the condition of individuals, organizations, and society. Psychologists respect and protect civil and human rights and the central importance of freedom of inquiry and expression in research, teaching, and publication. They strive to help the public in developing informed judgments and choices concerning human behavior. In doing so, they perform many roles, such as researcher, educator, diagnostician, therapist, supervisor, consultant, administrator, social interventionist, and expert witness. This Ethics Code provides a common set of principles and standards upon which psychologists build their professional and scientific work.

This Ethics Code is intended to provide specific standards to cover most situations encountered by psychologists. It has as its goals the welfare and protection of the individuals and groups with whom psychologists work and the education of members, students, and the public regarding ethical standards of the discipline.

The development of a dynamic set of ethical standards for psychologists' work-related conduct requires a personal commitment and lifelong effort to act ethically; to encourage ethical behavior by students, supervisees, employees, and colleagues; and to consult with others concerning ethical problems.

GENERAL PRINCIPLES

General Principles, as opposed to Ethical Standards, are aspirational in nature. Their intent is to guide and inspire psychologists toward the very highest ethical ideals of the profession. General Principles, in contrast to Ethical Standards, do not represent obligations and should not form the basis for imposing sanctions. Relying upon General Principles for either of these reasons distorts both their meaning and purpose.

PRINCIPLE A: BENEFICENCE AND NONMALEFICENCE

Psychologists strive to benefit those with whom they work and take care to do no harm. In their professional actions, psychologists seek to safeguard the welfare and rights of those with whom they interact professionally and other affected persons, and the welfare of animal subjects of research. When conflicts occur among psychologists' obligations or concerns, they attempt to resolve these conflicts in a responsible fashion that avoids or minimizes harm. Because psychologists' scientific and professional judgments and actions may affect the lives of others, they are alert to and guard against personal, financial, social, organizational, or political factors that might lead to misuse of their influence. Psychologists strive to be aware of the possible effect of their own physical and mental health on their ability to help those with whom they work.

PRINCIPLE B: FIDELITY AND RESPONSIBILITY

Psychologists establish relationships of trust with those with whom they work. They are aware of their professional and scientific responsibilities to society and to the specific communities in which they work. Psychologists uphold professional standards of conduct, clarify their professional roles and obligations, accept appropriate responsibility for their behavior, and seek to manage conflicts of interest that could lead to exploitation or harm. Psychologists consult with, refer to, or cooperate with other professionals and institutions to the extent needed to serve the best interests of those with whom they work. They are concerned about the ethical compliance of their colleagues' scientific and professional conduct. Psychologists strive to contribute a portion of their professional time for little or no compensation or personal advantage.

PRINCIPLE C: INTEGRITY

Psychologists seek to promote accuracy, honesty, and truthfulness in the science, teaching, and practice of psychology. In these activities psychologists do not steal, cheat, or engage in fraud, subterfuge, or intentional misrepresentation of fact. Psychologists strive to keep their promises and to avoid unwise or unclear commitments. In situations in which deception may be ethically justifiable to maximize benefits and minimize harm, psychologists have a serious obligation to consider the need for, the possible consequences of, and their responsibility to correct any resulting mistrust or other harmful effects that arise from the use of such techniques.

PRINCIPLE D: JUSTICE

Psychologists recognize that fairness and justice entitle all persons to access to and benefit from the contributions of psychology and to equal quality in the processes, procedures, and services being conducted by psychologists. Psychologists exercise reasonable judgment and take precautions to ensure that their potential biases, the boundaries of their competence, and the limitations of their expertise do not lead to or condone unjust practices.

PRINCIPLE E: RESPECT FOR PEOPLE'S RIGHTS AND DIGNITY

Psychologists respect the dignity and worth of all people, and the rights of individuals to privacy, confidentiality, and self-determination. Psychologists are aware that special safeguards may be necessary to protect the rights and welfare of persons or communities whose vulnerabilities impair autonomous decision making. Psychologists are aware of and respect cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status and consider these factors when working with members of such groups. Psychologists try to eliminate the effect on their work of biases based on those factors, and they do not knowingly participate in or condone activities of others based upon such prejudices.

ETHICAL STANDARDS**1. RESOLVING ETHICAL ISSUES****1.1 Misuse of Psychologists' Work**

If psychologists learn of misuse or misrepresentation of their work, they take reasonable steps to correct or minimize the misuse or misrepresentation.

1.02 Conflicts Between Ethics and Law, Regulations, or Other Governing Legal Authority

If psychologists' ethical responsibilities conflict with law, regulations, or other governing legal authority, psychologists make known their commitment to the Ethics Code and take steps to resolve the

conflict. If the conflict is un-resolvable via such means, psychologists may adhere to the requirements of the law, regulations, or other governing legal authority.

1.03 Conflicts between Ethics and Organizational Demands

If the demands of an organization with which psychologists are affiliated or for whom they are working conflict with this Ethics Code, psychologists clarify the nature of the conflict, make known their commitment to the Ethics Code, and to the extent feasible, resolve the conflict in a way that permits adherence to the Ethics Code.

1.04 Informal Resolution of Ethical Violations

When psychologists believe that there may have been an ethical violation by another psychologist, they attempt to resolve the issue by bringing it to the attention of that individual, if an informal resolution appears appropriate and the intervention does not violate any confidentiality rights that may be involved.

1.05 Reporting Ethical Violations

If an apparent ethical violation has substantially harmed or is likely to substantially harm a person or organization and is not appropriate for informal resolution under Standard 1.04, Informal Resolution of Ethical Violations, or is not resolved properly in that fashion, psychologists take further action appropriate to the situation. Such action might include referral to state or national committees on professional ethics, to state licensing boards, or to the appropriate institutional authorities. This standard does not apply when an intervention would violate confidentiality rights or when psychologists have been retained to review the work of another psychologist whose professional conduct is in question.

1.06 Cooperating With Ethics Committees

Psychologists cooperate in ethics investigations, proceedings, and resulting requirements of the APA or any affiliated state psychological association to which they belong. In doing so, they address any confidentiality issues. Failure to cooperate is itself an ethics violation. However, making a request for deferment of adjudication of an ethics complaint pending the outcome of litigation does not alone constitute non-cooperation.

1.07 Improper Complaints

Psychologists do not file or encourage the filing of ethics complaints that are made with reckless disregard for or willful ignorance of facts that would disprove the allegation.

1.08 Unfair Discrimination Against Complainants and Respondents

Psychologists do not deny persons employment, advancement, admissions to academic or other programs, tenure, or promotion, based solely upon their having made or their being the subject of an ethics complaint. This does not preclude taking action based upon the outcome of such proceedings or considering other appropriate information.

2. COMPETENCE

2.01 Boundaries of Competence

(a) Psychologists provide services, teach, and conduct research with populations and in areas only within the boundaries of their competence, based on their education, training, supervised experience, consultation, study, or professional experience.

(b) Where scientific or professional knowledge in the discipline of psychology establishes that an understanding of factors associated with age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, or socioeconomic status is essential for effective implementation of their services or research, psychologists have or obtain the training, experience, consultation, or supervision necessary to ensure the competence of their services, or they make appropriate referrals.

(c) Psychologists planning to provide services, teach, or conduct research involving populations, areas, techniques, or technologies new to them undertake relevant education, training, supervised experience, consultation, or study.

(d) When psychologists are asked to provide services to individuals for whom appropriate mental health services are not available and for which psychologists have not obtained the competence necessary, psychologists with closely related prior training or experience may provide such services in order to ensure that services are not denied if they make a reasonable effort to obtain the competence required by using relevant research, training, consultation, or study.

(e) In those emerging areas in which generally recognized standards for preparatory training do not yet exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect clients/patients, students, supervisees, research participants, organizational clients, and others from harm.

(f) When assuming forensic roles, psychologists are or become reasonably familiar with the judicial or administrative rules governing their roles.

2.02 Providing Services in Emergencies

In emergencies, when psychologists provide services to individuals for whom other mental health services are not available and for which psychologists have not obtained the necessary training, psychologists may provide such services in order to ensure that services are not denied. The services are discontinued as soon as the emergency has ended or appropriate services are available.

2.03 Maintaining Competence

Psychologists undertake ongoing efforts to develop and maintain their competence.

2.04 Bases for Scientific and Professional Judgments

Psychologists' work is based upon established scientific and professional knowledge of the discipline.

2.05 Delegation of Work to Others

Psychologists who delegate work to employees, supervisees, or research or teaching assistants or who use the services of others, such as interpreters, take reasonable steps to (1) avoid delegating such work to persons who have a multiple relationship with those being served that would likely lead to exploitation or loss of objectivity; (2) authorize only those responsibilities that such persons can be expected to perform competently on the basis of their education, training, or experience, either independently or with the level of supervision being provided; and (3) see that such persons perform these services competently.

2.06 Personal Problems and Conflicts

(a) Psychologists refrain from initiating an activity when they know or should know that there is a substantial likelihood that their personal problems will prevent them from performing their work-related activities in a competent manner.

(b) When psychologists become aware of personal problems that may interfere with their performing work-related duties adequately, they take appropriate measures, such as obtaining professional consultation or assistance, and determine whether they should limit, suspend, or terminate their work-related duties.

3. HUMAN RELATIONS

3.01 Unfair Discrimination

In their work-related activities, psychologists do not engage in unfair discrimination based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, socioeconomic status, or any basis proscribed by law.

3.02 Harassment

Psychologists do not knowingly engage in behavior that is harassing or demeaning to persons with whom they interact in their work based on factors such as those persons' age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, or socioeconomic status.

3.03 Avoiding Harm

Psychologists take reasonable steps to avoid harming their clients/patients, students, supervisees, research participants, organizational clients, and others with whom they work, and to minimize harm where it is foreseeable and unavoidable.

3.04 Multiple Relationships

(a) A multiple relationship occurs when a psychologist is in a professional role with a person and (1) at the same time is in another role with the same person, (2) at the same time is in a relationship with a person closely associated with or related to the person with whom the psychologist has the professional relationship, or (3) promises to enter into another relationship in the future with the person or a person closely associated with or related to the person.

A psychologist refrains from entering into a multiple relationship if the multiple relationship could reasonably be expected to impair the psychologist's objectivity, competence, or effectiveness in performing his or her functions as a psychologist, or otherwise risks exploitation or harm to the person with whom the professional relationship exists.

Multiple relationships that would not reasonably be expected to cause impairment or risk exploitation or harm are not unethical.

(b) If a psychologist finds that, due to unforeseen factors, a potentially harmful multiple relationship has arisen, the psychologist takes reasonable steps to resolve it with due regard for the best interests of the affected person and maximal compliance with the Ethics Code.

(c) When psychologists are required by law, institutional policy, or extraordinary circumstances to serve in more than one role in judicial or administrative proceedings, at the outset they clarify role expectations and the extent of confidentiality and thereafter as changes occur.

3.05 Conflict of Interest

Psychologists refrain from taking on a professional role when personal, scientific, professional, legal, financial, or other interests or relationships could reasonably be expected to (1) impair their objectivity,

competence, or effectiveness in performing their functions as psychologists or (2) expose the person or organization with whom the professional relationship exists to harm or exploitation.

3.06 Third-Party Requests for Services

When psychologists agree to provide services to a person or entity at the request of a third party, psychologists attempt to clarify at the outset of the service the nature of the relationship with all individuals or organizations involved. This clarification includes the role of the psychologist (e.g., therapist, consultant, diagnostician, or expert witness), an identification of who is the client, the probable uses of the services provided or the information obtained, and the fact that there may be limits to confidentiality.

3.07 Exploitative Relationships

Psychologists do not exploit persons over whom they have supervisory, evaluative, or other authority such as clients/patients, students, supervisees, research participants, and employees.

3.08 Cooperation with Other Professionals

When indicated and professionally appropriate, psychologists cooperate with other professionals in order to serve their clients/patients effectively and appropriately.

3.09 Informed Consent

(a) When psychologists conduct research or provide assessment, therapy, counseling, or consulting services in person or via electronic transmission or other forms of communication, they obtain the informed consent of the individual or individuals using language that is reasonably understandable to that person or persons except when conducting such activities without consent is mandated by law or governmental regulation or as otherwise provided in this Ethics Code.

(b) For persons who are legally incapable of giving informed consent, psychologists nevertheless (1) provide an appropriate explanation, (2) seek the individual's assent, (3) consider such persons' preferences and best interests, and (4) obtain appropriate permission from a legally authorized person, if such substitute consent is permitted or required by law. When consent by a legally authorized person is not permitted or required by law, psychologists take reasonable steps to protect the individual's rights and welfare.

(c) When psychological services are court ordered or otherwise mandated, psychologists inform the individual of the nature of the anticipated services, including whether the services are court ordered or mandated and any limits of confidentiality, before proceeding.

(d) Psychologists appropriately document written or oral consent, permission, and assent.

3.10 Psychological Services Delivered To or Through Organizations

(a) Psychologists delivering services to or through organizations provide information beforehand to clients and when appropriate those directly affected by the services about (1) the nature and objectives of the services, (2) the intended recipients, (3) which of the individuals are clients, (4) the relationship the psychologist will have with each person and the organization, (5) the probable uses of services provided and information obtained, (6) who will have access to the information, and (7) limits of confidentiality. As soon as feasible, they provide information about the results and conclusions of such services to appropriate persons.

(b) If psychologists will be prohibited by law or by organizational roles from providing such information to particular individuals or groups, they so inform those individuals or groups at the outset of the service.

3.11 Interruption of Psychological Services

Unless otherwise covered by contract, psychologists make reasonable efforts to plan for facilitating services in the event that psychological services are interrupted by factors such as the psychologist's illness, death, unavailability, relocation, or retirement or by the client's/patient's relocation or financial limitations.

4. PRIVACY AND CONFIDENTIALITY

4.01 Maintaining Confidentiality

Psychologists have a primary obligation and take reasonable precautions to protect confidential information obtained through or stored in any medium, recognizing that the extent and limits of confidentiality may be regulated by law or established by institutional rules or professional or scientific relationship.

4.02 Discussing the Limits of Confidentiality

(a) Psychologists discuss with persons (including, to the extent feasible, persons who are legally incapable of giving informed consent and their legal representatives) and organizations with whom they establish a scientific or professional relationship (1) the relevant limits of confidentiality and (2) the foreseeable uses of the information generated through their psychological activities.

(b) Unless it is not feasible or is contraindicated, the discussion of confidentiality occurs at the outset of the relationship and thereafter as new circumstances may warrant.

(c) Psychologists who offer services, products, or information via electronic transmission inform clients/patients of the risks to privacy and limits of confidentiality.

4.03 Recording

Before recording the voices or images of individuals to whom they provide services, psychologists obtain permission from all such persons or their legal representatives.

4.04 Minimizing Intrusions on Privacy

(a) Psychologists include in written and oral reports and consultations, only information relevant to the purpose for which the communication is made.

(b) Psychologists discuss confidential information obtained in their work only for appropriate scientific or professional purposes and only with persons clearly concerned with such matters.

4.05 Disclosures

(a) Psychologists may disclose confidential information with the appropriate consent of the organizational client, the individual client/patient, or another legally authorized person on behalf of the client/patient unless prohibited by law.

(b) Psychologists disclose confidential information without the consent of the individual only as mandated by law, or where permitted by law for a valid purpose such as to (1) provide needed professional services; (2) obtain appropriate professional consultations; (3) protect the client/patient, psychologist, or others from harm; or (4) obtain payment for services from a client/patient, in which instance disclosure is limited to the minimum that is necessary to achieve the purpose.

4.06 Consultations

When consulting with colleagues, (1) psychologists do not disclose confidential information that reasonably could lead to the identification of a client/patient, research participant, or other person or organization with whom they have a confidential relationship unless they have obtained the prior consent of the person or organization or the disclosure cannot be avoided, and (2) they disclose information only to the extent necessary to achieve the purposes of the consultation.

4.07 Use of Confidential Information for Educational or Other Purposes

Psychologists do not disclose in their writings, lectures, or other public media, confidential, personally identifiable information concerning their clients/patients, students, research participants, organizational clients, or other recipients of their services that they obtained during the course of their work, unless (1) they take reasonable steps to disguise the person or organization, (2) the person or organization has consented in writing, or (3) there is legal authorization for doing so.

5. RECORD KEEPING AND FEES

5.01 Documentation of Professional and Scientific Work and Maintenance of Records

Psychologists create, and to the extent the records are under their control, maintain, disseminate, store, retain, and dispose of records and data relating to their professional and scientific work in order to (1) facilitate provision of services later by them or by other professionals, (2) allow for replication of research design and analyses, (3) meet institutional requirements, (4) ensure accuracy of billing and payments, and (5) ensure compliance with law.

5.02 Maintenance, Dissemination, and Disposal of Confidential Records of Professional and Scientific Work

- (a) Psychologists maintain confidentiality in creating, storing, accessing, transferring, and disposing of records under their control, whether these are written, automated, or in any other medium.
- (b) If confidential information concerning recipients of psychological services is entered into databases or systems of records available to persons whose access has not been consented to by the recipient, psychologists use coding or other techniques to avoid the inclusion of personal identifiers.
- (c) Psychologists make plans in advance to facilitate the appropriate transfer and to protect the confidentiality of records and data in the event of psychologists' withdrawal from positions or practice.

5.03 Withholding Records for Nonpayment

Psychologists may not withhold records under their control that are requested and needed for a client's/patient's emergency treatment solely because payment has not been received.

5.04 Fees and Financial Arrangements

- (a) As early as is feasible in a professional or scientific relationship, psychologists and recipients of psychological services reach an agreement specifying compensation and billing arrangements.
- (b) Psychologists' fee practices are consistent with law.
- (c) Psychologists do not misrepresent their fees.
- (d) If limitations to services can be anticipated because of limitations in financing, this is discussed with the recipient of services as early as is feasible.
- (e) If the recipient of services does not pay for services as agreed, and if psychologists intend to use collection agencies or legal measures to collect the fees, psychologists first inform the person that such measures will be taken and provide that person an opportunity to make prompt payment.

5.05 Barter with Clients/Patients

Barter is the acceptance of goods, services, or other non-monetary remuneration from clients/patients in return for psychological services. Psychologists may barter only if (1) it is not clinically contraindicated, and (2) the resulting arrangement is not exploitative.

5.06 Accuracy in Reports to Payors and Funding Sources

In their reports to payors for services or sources of research funding, psychologists take reasonable steps to ensure the accurate reporting of the nature of the service provided or research conducted, the fees, charges, or payments, and where applicable, the identity of the provider, the findings, and the diagnosis.

5.07 Referrals and Fees

When psychologists pay, receive payment from, or divide fees with another professional, other than in an employer-employee relationship, the payment to each is based on the services provided (clinical, consultative, administrative, or other) and is not based on the referral itself.

6. ASSESSMENT

6.01 Bases for Assessments

(a) Psychologists base the opinions contained in their recommendations, reports, and diagnostic or evaluative statements, including forensic testimony, on information and techniques sufficient to substantiate their findings.

(b) Except as noted in 6.01c, psychologists provide opinions of the psychological characteristics of individuals only after they have conducted an examination of the individuals adequate to support their statements or conclusions. When, despite reasonable efforts, such an examination is not practical, psychologists document the efforts they made and the result of those efforts, clarify the probable impact of their limited information on the reliability and validity of their opinions, and appropriately limit the nature and extent of their conclusions or recommendations.

(c) When psychologists conduct a record review or provide consultation or supervision and an individual examination is not warranted or necessary for the opinion, psychologists explain this and the sources of information on which they based their conclusions and recommendations.

6.02 Use of Assessments

(a) Psychologists administer, adapt, score, interpret, or use assessment techniques, interviews, tests, or instruments in a manner and for purposes that are appropriate in light of the research on or evidence of the usefulness and proper application of the techniques.

(b) Psychologists use assessment instruments whose validity and reliability have been established for use with members of the population tested. When such validity or reliability has not been established, psychologists describe the strengths and limitations of test results and interpretation.

(c) Psychologists use assessment methods that are appropriate to an individual's language preference and competence, unless the use of an alternative language is relevant to the assessment issues.

6.03 Informed Consent in Assessments

(a) Psychologists obtain informed consent for assessments, evaluations, or diagnostic services, as described in Standard 3.10, Informed Consent, except when (1) testing is mandated by law or governmental regulations; (2) informed consent is implied because testing is conducted as a routine educational, institutional, or organizational activity (e.g., when participants voluntarily agree to assessment when applying for a job); or (3) one purpose of the testing is to evaluate decisional capacity. Informed consent includes an explanation of the nature and purpose of the assessment, fees,

involvement of third parties, and limits of confidentiality and sufficient opportunity for the client/patient to ask questions and receive answers.

(b) Psychologists inform persons with questionable capacity to consent or for whom testing is mandated by law or governmental regulations about the nature and purpose of the proposed assessment services, using language that is reasonably understandable to the person being assessed.

(c) Psychologists using the services of an interpreter obtain informed consent from the client/patient to use that interpreter, ensure that confidentiality of test results and test security are maintained, and include in their recommendations, reports, and diagnostic or evaluative statements, including forensic testimony, discussion of any limitations on the data obtained.

6.04 Interpreting Assessment Results

When interpreting assessment results, including automated interpretations, psychologists take into account the purpose of the assessment as well as the various test factors, test-taking abilities, and other characteristics of the person being assessed, such as situational, personal, linguistic, and cultural differences that might affect psychologists' judgments or reduce the accuracy of their interpretations. They indicate any significant limitations of their interpretations.

6.05 Assessment by Unqualified Persons

Psychologists do not promote the use of psychological assessment techniques by unqualified persons, except when such use is conducted for training purposes with appropriate supervision.

6.06 Obsolete Tests and Outdated Test Results

(a) Psychologists do not base their assessment or intervention decisions or recommendations on data or test results that are outdated for the current purpose.

(b) Psychologists do not base such decisions or recommendations on tests and measures that are obsolete and not useful for the current purpose.

6.07 Explaining Assessment Results

Regardless of whether the scoring and interpretation are done by psychologists, by employees or assistants, or by automated or other outside services, psychologists take reasonable steps to ensure that explanations of results are given to the individual or designated representative unless the nature of the relationship precludes provision of an explanation of results (such as in some organizational consulting, pre-employment or security screenings, and forensic evaluations), and this fact has been clearly explained to the person being assessed in advance.

7. THERAPY

7.01 Informed Consent to Therapy

(a) When obtaining informed consent to therapy, psychologists inform clients/patients as early as is feasible in the therapeutic relationship about the nature and anticipated course of therapy, fees, involvement of third parties, and limits of confidentiality and provide sufficient opportunity for the client/patient to ask questions and receive answers.

(b) When obtaining informed consent for treatment for which generally recognized techniques and procedures have not been established, psychologists inform their clients/patients of the developing nature of the treatment, the potential risks involved, alternative treatments that may be available, and the voluntary nature of their participation.

(c) When the therapist is a trainee and the legal responsibility for the treatment provided resides with the supervisor, the client/patient, as part of the informed consent procedure, is informed that the therapist is in training and is being supervised and is given the name of the supervisor.

7.02 Therapy Involving Couples or Families

(a) When psychologists agree to provide services to several persons who have a relationship (such as spouses, significant others, or parents and children), they take reasonable steps to clarify at the outset (1) which of the individuals are clients/patients and (2) the relationship the psychologist will have with each person. This clarification includes the psychologist's role and the probable uses of the services provided or the information obtained.

(b) If it becomes apparent that psychologists may be called on to perform potentially conflicting roles (such as family therapist and then witness for one party in divorce proceedings), psychologists take reasonable steps to clarify and modify, or withdraw from, roles appropriately.

7.03 Group Therapy

When psychologists provide services to several persons in a group setting, they describe at the outset the roles and responsibilities of all parties and the limits of confidentiality.

7.04 Providing Therapy to Those Served by Others

In deciding whether to offer or provide services to those already receiving mental health services elsewhere, psychologists carefully consider the treatment issues and the potential client's/patient's welfare. Psychologists discuss these issues with the client/patient or another legally authorized person on behalf of the client/patient in order to minimize the risk of confusion and conflict, consult with the other service providers when appropriate, and proceed with caution and sensitivity to the therapeutic issues.

7.05 Sexual Intimacies with Current Therapy Clients/Patients

Psychologists do not engage in sexual intimacies with current therapy clients/patients.

7.06 Sexual Intimacies With Relatives or Significant Others of Current Therapy Clients/Patients

Psychologists do not engage in sexual intimacies with individuals they know to be close relatives, guardians, or significant others of current clients/patients. Psychologists do not terminate therapy to circumvent this standard.

7.07 Interruption of Therapy

When entering into employment or contractual relationships, psychologists make reasonable efforts to provide for orderly and appropriate resolution of responsibility for client/patient care in the event that the employment or contractual relationship ends, with paramount consideration given to the welfare of the client/patient.

7.08 Terminating Therapy

(a) Psychologists terminate therapy when it becomes reasonably clear that the client/patient no longer needs the service, is not likely to benefit, or is being harmed by continued service.

(b) Psychologists may terminate therapy when threatened or otherwise endangered by the client/patient or another person with whom the client/patient has a relationship.

(c) Except where precluded by the actions of clients/patients or third-party payors, prior to termination psychologists provide pre-termination counseling and suggest alternative service providers as appropriate.

CONCLUSION

As we study these ethical standards, it becomes clear that clinical psychologists must closely and carefully follow ethical principles to ensure that they behave in an appropriate, responsible, and professional manner protecting the public as well as the profession.

THE ROLE OF RESEARCH IN CLINICAL PSYCHOLOGY

Research lays a foundation of knowledge for understanding the phenomena of interest to clinical psychologists, including psychopathology, mental health, and the relationship between psychological factors and physical disease. Research also provides a body of evidence to guide clinical practice, including empirically validated methods to assess people and their problems and empirically supported methods of prevention and treatment. Psychological tests and other assessment methods used in clinical practice should be based on research that has established their reliability and validity. Research findings should also identify those interventions that have been shown to be more effective than no treatment or alternative forms of treatment.

Just as research informs clinical practice, clinical experiences provide a source of ideas and hypotheses for research. Research also provides ideas for new directions and applications for the field of clinical psychology, including links between clinical psychology and research in other behavioral, biological, and social sciences.

Because of the wide range of questions that confront researchers in clinical psychology, a variety of methods are used in research in this field. Research designs used by clinical psychologists range from single-case designs that study one individual at a time to large -scale, multisided studies involving hundreds or even thousands of participants. Clinical psychologists conduct research in many different settings including experimentally controlled laboratories as well as naturalistic settings such as hospitals, clinics, schools, and the community. Clinical researchers utilize various methods of data analysis, ranging from complex multivariate statistics used with large samples to non-statistical methods in single-case studies. The methods that are chosen by researchers shape the types of questions that are asked; reflect the hypotheses that are being tested; and influence the interpretation of findings.

RESEARCH DESIGNS

There are four basic types of research designs from which to choose: descriptive designs, co-relational designs, experimental designs, and single-case designs.

DESCRIPTIVE RESEARCH DESIGNS

Descriptive research designs are used in clinical psychology to report on the prevalence or incidence of a human characteristic or problem in the population. The goal of this type of research is to describe a particular phenomenon without trying to predict or explain when or why it occurs. Descriptive studies are often an important first step in research on a particular problem or disorder, because they allow the researchers to define the scope of a problem in the population.

Researchers involved in descriptive research are primarily concerned with accurate measurement of the problem and with the representativeness of the sample that they include in their study. If participation in a study is biased toward a particular segment of the population, the results of the study could misrepresent the prevalence of a problem as higher as or lower than it actually is in the population as a whole. This type of research does not attempt to predict or understand the causes of a problem, however, because other variables that might be hypothesized to be causes or correlates of the problem typically are not measured.

A descriptive approach is used most frequently in epidemiological studies in which researchers try to identify the prevalence of different forms of psychopathology. **Epidemiological research** is designed to establish the number, or prevalence, of disorders in a population at a particular point in time as well as the onset, or incidence, of new cases during a specified period of time (e.g., the past year). Epidemiology has a long history in the field of public health, where studies have been conducted to

understand the prevalence and incidence of physical disease. Epidemiological methods have been used more recently to estimate the extent of psychiatric disorders within populations or countries.

CORRELATIONAL RESEARCH DESIGNS

Correlational research designs are used to determine the degree to which there is an association between two or more variables. In these studies, the researcher wants to determine whether, and to what extent, different variables are related to each other. This involves measuring each variable and then using statistics to determine how changes in one variable are related to changes in another.

THE MODEL UNDERLYING CORRELATIONAL RESEARCH METHODS

Correlational research designs are founded on the assumption that reality is best described as a network of interacting and mutually-causal relationships. Everything affects--and is affected by--everything else. This web of relationships is not linear, as in experimental research. Thus, the dynamics of a system--how each part of the whole system affects each other part--is more important than causality. As a rule, correlational designs do not indicate causality.

A simple (or bivariate) correlation represents the relationship that is observed between two variables in a sample of individuals. The same two variables are assessed for each person in the sample and a correlation coefficient is calculated to provide a numerical representation of the magnitude and direction of this association. In other words, the relationship has a "degree" and a "direction".

The degree of relationship (how closely they are related) is usually expressed as a number between -1 and +1, the so-called correlation coefficient. This coefficient can range from positive 1.00 (one variable increases in value at exactly the same rate as the other variable increases in value), to zero (no association or relationship between the variables), to negative 1.00 (one variable decreases in value at exactly the same rate as the other variable increases in value). As the correlation coefficient moves toward either -1 or +1, the relationship gets stronger until there is a "perfect correlation" at either extreme.

The direction of the relationship is indicated by the "-" and "+" signs. A negative correlation means that as scores on one variable rise, scores on the other decrease. A positive correlation indicates that the scores move together, both increasing or both decreasing.

A student's grade and the amount of studying done, for example, are generally positively correlated, meaning that the more study done, the higher the student's grade will be. Stress and health, on the other hand, are generally negatively correlated, meaning that the more stresses a person will experience, and the lower his /her health status will be.

LIMITATION

The researcher cannot make conclusions about cause and effect; even a strong correlation does not mean that changes in one variable cause changes in another (correlation can be due to a third variable).

EXPERIMENTAL RESEARCH DESIGNS

Experimental research designs involve the control or manipulation of one or more variables (the independent variables) to determine their effect on a second variable or set of variables (the dependent variables). Because the independent variable is under the control of the researcher, it is possible to determine if changes in this factor cause changes to occur in the dependent variable.

Experimental designs are used in two primary ways in clinical psychology research. First, researchers conduct controlled experiments to study the possible causal relationship between two (or more)

variables. Experimental studies of psychopathology are important to an understanding of the possible causes of psychological disorders. However, ethical concerns obviously prohibit any research that actually causes a psychological disorder. Rather, experimental studies are conducted on analogues (representations) of psychopathology, or they are conducted with patients already suffering from a type of psychopathology to learn about factors that are relevant to an understanding of the disorder. Experimental research conducted with animals can have important implications for an understanding of psychopathology in humans, because research ethics allow, for some what different procedures to be used with animals.

The second major area in which experimental designs are used in clinical psychology is in studies that are designed to evaluate the effectiveness of an intervention to prevent or treat a problem and in which participants are randomly assigned to a group that receives the intervention or to an alternative condition (a control group).

THE MODEL UNDERLYING EXPERIMENTAL RESEARCH METHODS

Experimental research designs are founded on the assumption that the world works according to causal laws. These laws are essentially linear, though complicated and interactive. The goal of experimental research is to establish these cause-and-effect laws by isolating causal variables.

A softer view of the philosophical assumptions behind experimental designs is that **SOMETIMES** and **IN SOME WAYS**, the world works according to causal laws. Such cause-and-effect relationships may not be a final view of reality, but demonstrating cause and effect is useful in some circumstances.

Both of these views agree that some (if not all) important psychological questions are questions about what causes what. Experimental research designs are the tools to use for these questions.

ESSENTIAL CHARACTERISTICS OF AN EXPERIMENT

To be "experimental", a study must meet two conditions: having an experimental independent variable with experimental control and having random assignment. These are described below:

In an experimental study, there is **at least one experimental independent variable**, and there is **experimental control**.

(a) EXPERIMENTAL/INDEPENDENT VARIABLE

The researcher systematically alters/manipulates one variable (independent variable, or IV) to see if the manipulation causes a change in some aspect of behavior (dependent variable, or DV). There must be at least one manipulated variable for a study to be an experiment. Some examples include:

- The effect of training program type (IV) on cashiers' job performance (DV)
- The effect of servers' appearance (IV) on size of tip (DV)

(b) EXPERIMENTAL CONTROL

All factors other than the IV that could affect the DV must be held constant. This means that you avoid confounding variables, such as when the experimenter affects the subjects' behavior unintentionally. If there is no such control, the study is not an experiment.

2. In an experimental study, there is **random assignment** of subjects to groups (conditions). In an experiment, subjects must be randomly assigned to experimental conditions, meaning that all subjects have an equal chance of being exposed to each condition. In the examples given above:

- Newly hired cashiers are randomly assigned to one of 3 training programs
- Servers in a restaurant are randomly assigned to one of 2 groups—the first group dresses in new uniforms and the second group dresses in dirty uniforms

Random assignment to groups in treatment studies makes it more likely that the groups are equivalent on all the important variables that relate to the possible effects of treatment. If the groups are identical except for their exposure or lack of exposure to the treatment, any differences between the groups after the completion of the treatment are inferred to have been caused directly by the treatment.

The GOAL OF EXPERIMENTAL RESEARCH METHODS is to establish cause-and-effect relationships between variables.

We hypothesize that the Independent Variable caused the changes in the Dependent Variable. However, these changes or effects may have been caused by many other factors or Alternative Hypotheses.

The PURPOSE, therefore, of experimental designs is to eliminate alternative hypotheses. If we can successfully eliminate all alternative hypotheses, we can argue--by a process of elimination--that the Independent Variable is the cause.

Good experimental designs are those which eliminate more alternative hypotheses.

FOR EXAMPLE: Say I am testing whether a new form of psychotherapy is successful at improving mental health. I hypothesize that this psychotherapy is the cause of improved mental health in the research participants.

I will use an experimental design to eliminate all (or as many as possible) alternative hypotheses. If I can eliminate alternative explanations, I will be able to make the case that the psychotherapy was the cause of the improvements in the research participants.

TYPES OF VARIABLES

1. INDEPENDENT VARIABLE (IV): IV has levels, conditions, or treatments. Experimenter may manipulate conditions or measure and assign subjects to conditions; supposed to be the cause. In the example, it is the psychotherapy.

2. DEPENDENT VARIABLE (DV): measured by the experimenter; the Effect or result. In the example, it is the mental health of the participants.

3. CONTROL VARIABLES: held constant by the experimenter to eliminate them as potential causes. For instance, if I use only research participants who have been problems with anxiety or depression, this diagnosis would be a control variable.

4. RANDOM VARIABLES: allowed to vary freely to eliminate them as potential causes. Many other characteristics of the research participants, as long as they really do vary freely, are also random variables. Examples might include age, personality type, or career goals.

5. CONFOUNDING VARIABLES: vary systematically with the independent variable; may also be a cause. Good experimental designs eliminate them.

Say I divide the research participants into two groups, one of which gets the new psychotherapy (the experimental group) and one of which does not (the control group). If there is some systematic difference between these two groups, it will not be a fair test.

If those in the psychotherapy group know they are getting a new treatment and therefore expect to get better while those in the control group know they are not getting any treatment and expect to get worse, the expectations will be a confounding variable. If the experimental group does improve, we will not know whether it was because of the psychotherapy itself (the Independent Variable) or because of the participants' expectations (a Confounding Variable).

CONCEPTS IN EXPERIMENTAL RESEARCH

1. RELIABILITY

Are the results of the experiment repeatable? If the experiment were done the same way again, would it produce the same results?

Reliability is a requirement before the validity of the experiment can be established. It refers to the consistency of the results of an experiment i.e. if we get the same results again and again by repeating an experiment, we can say that the results of this experiment are reliable.

2. INTERNAL VALIDITY

Internal validity refers to the accuracy or truth-value of an experiment (how accurately the experiment measures the variables that it was designed to measure). Internal validity also indicates the extent to which the experimenter is sure about the results i.e. did the independent variable cause the effects in the dependent variable?

In experimental research, this usually means eliminating alternative hypotheses.

In the example evaluating a new psychotherapy, the issue of internal validity is whether the psychotherapy really was the causal factor in improving participants' mental health.

3. EXTERNAL VALIDITY

External validity of an experiment refers to its generalizability i.e. to what extent can the results be applied in another setting or to another population of research participants.

HYPOTHESES

Experimental research methods revolve around hypotheses, educated guesses. We typically start with a hypothesis about how the results will turn out, i.e., that there is an effect and it is due to the independent variable. This first hypothesis is the research hypothesis.

Then we hold the possibility that there is no effect of the independent variable on the dependent variable or that the differences observed are due to chance only. This second hypothesis is the null hypothesis. The first step in experimental research, then, is ruling out chance. Put another way, we set up an experimental design that will allow us to reject the null hypothesis. If we can confidently reject the null hypothesis, then we gain confidence in the research hypothesis.

At this point, another group of hypotheses comes into play, the alternative hypotheses. If there is an effect beyond chance, it may be due to the independent variable or it may be due to a number of other factors, so-called extraneous variables or confounding variables. Again, we use experimental designs to allow us to eliminate alternative hypotheses.

TYPES OF HYPOTHESES

1. Research hypothesis states that results are due to the IV.

In the example of a new form of psychotherapy, the research hypothesis is that the new form of psychotherapy is better than either no therapy or conventional therapies.

2. Null hypothesis states that differences are due to chance or that there are no differences between treatments (used in statistical analysis).

In the example, the null hypothesis is that the new form of psychotherapy is no better than either no therapy or conventional therapies.

3. Alternative hypotheses suggest that results are due to factors other than IV. These factors, rather than the independent variable, may cause the improvements.

Next is a list of alternative hypotheses.

ALTERNATIVE HYPOTHESES

1. Subject effect or selection effect: results are due to systematic differences in research participants ("subjects") assigned to different conditions or treatments.

Example: If the research participants who receive the new form of psychotherapy are different from those in a control group, a selection effect would occur. One group could be healthier, more motivated, or more experienced with psychotherapy.

A problem in some research is letting people choose to be part of a program or treatment and using others who did not choose to be part of the program as a control group. Such "self-selected" groups are usually different from groups made up of people who do not choose to be in a treatment group.

Common solution: Matching or random assignment to groups

2. History effect: results are due to events outside the experiment.

Example: This could occur if there is one group of research participants who are being measured at several points in time. Some event that is not part of the research, say something traumatic like a natural disaster, which occurs at the same time as the treatment could affect the results.

Common solution: A control group which will be exposed to the same history but not the new form of psychotherapy.

3. Maturation effect: results are due to changes within subjects over time, e.g., growth, warm-up, fatigue, learning to learn. This is a problem in research that measures a dependent variable over a period of time and especially in research with repeated exposures to the independent variable.

Example: If there is one group of research participants, their mental health may improve over time without the new form of psychotherapy.

Common solution: A control group which is measured over the same period of time but does not receive the new psychotherapy.

4. Experimenter expectancy effect or Experimenter bias: results are due to the experimenter's actions or expectations. A number of studies have shown that researchers tend to find the results they are looking for, a kind of self-fulfilling prophecy. The causes for this result range from overt cheating to very subtle influences on data collection and interactions with research participants. Experimenters are not always aware of the extent of these influences.

Example: If the researcher is the one to assess the research participants' mental health (the dependent variable), he or she may distort the assessments in the direction of the research hypothesis. Other, more subtle forms of influence may also occur.

Common solution: Use independent judges or more objective measurements of the dependent variable.

5. Demand characteristics or Hawthorne effect: results are due to subjects' expectations of desired behavior in the research setting or the social psychology of the experiment.

This is called "demand" because participants may perceive a demand to behave or report on themselves in a certain way. It is called the Hawthorne Effect after a famous series of experiments at a manufacturing plant in Hawthorne, Ohio. In those studies, researchers selected a group of factory workers and changed various conditions such as lighting to see what would increase performance. They found that any change increased performance, suggesting that research participants were responding to the general expectation that they would perform better and to the social dynamics of being observed closely.

Example: The researcher communicates his or her expectations to the research participants which in turn influences their responses. If the researcher is measuring depression, research participants may report less depression regardless of their feelings because they think that is what is expected of them.

Common solution: Blind and double-blind designs help avoid these problems. Also, using a control group which is measured the same way (thus getting some of the same influences) without the treatment.

6. Testing effect or reactivity: results are due to the data gathering procedures, e.g., being influenced by the test or learning from one test administration to the next.

Example: Measuring the participants' mental health could get them thinking about their lives, thus improving them. Improvements would then be due to the data gathering, not the therapy itself.

Common solution: Use a control group which is also measured, but without the therapy or with an alternative form of therapy.

7. Regression artifact or regression-to-the-mean: results are due to extreme scores moving toward the mean over time.

Example: If a group is made up of those with the worst mental health scores (say, the most anxious or the most depressed), over time they are likely to improve without therapy. This may be mistakenly attributed to the therapy.

Common solution: Use a control group which has similar characteristics (mental health scores) but which does not receive the new therapy.

8. Instrumentation: results are due to an aberration in measuring tools, either mechanical instrument or test.

Example: The dependent variable (participants' mental health) may be measured by a poor test.

Common solution: Select or develop a better measure.

9. Halo effect: the researcher's expectations about certain subjects based on some subject characteristics. E.g., an outgoing, sociable subject is rated as being more intelligent or having higher values.

Example: Judges rating the mental health of the participants (the dependent variable) may ascribe better mental health based on other characteristics.

Common solutions: Random assignment, blind judges, more objective measures.

10. Attrition or mortality effect: When subjects drop out of an experiment, it can bias the results. This is especially true when more subjects drop out of one treatment condition than another. The study is no longer a fair test. This leads to a kind of subject effect because the subjects in the different groups are no longer equivalent.

Example: Say the study consists of 3 groups: the new psychotherapy group, a conventional therapy group, and a no-therapy group. If more research participants in the new therapy control group drop out of the study, it may be because the new therapy was not appropriate for them. This leaves only those who benefited most, making the therapy look better than it really is.

Common solution: There is no way to force research participants to stay in the study, but if attrition looks like a problem, find out why participants dropped out. This can sometimes give important clues about the study.

11. Other non-specific factors and alternative hypotheses that may arise in a particular experiment.

For instance, in psychotherapy research, the specific intervention itself may not cause the benefits. Rather, the therapeutic relationship may lead to benefits. A therapy that allows for more and better contact between therapist and client will look better, but the benefits are not because of the therapy itself. The independent variable, the new therapy, is not causing the benefits. Instead, the relationship factor which is confounded with the independent variable is causing the effects.

Solutions are specific to the research study and the particular alternative hypothesis.

A COMMENT

With so many ways to go wrong, it may seem from this list that all research is hopelessly flawed. In a sense, this is accurate. There is no such thing as perfection in an experimental design. However, perfection is not the best standard to use.

It is suggested that we look for studies that are good enough. Even though there are always ways to refine and extend any study, there are many experiments that are good enough to base strong conclusions on.

TYPES OF EXPERIMENTAL DESIGNS

TRUE EXPERIMENTAL DESIGNS

These designs attempt to eliminate most alternative hypotheses, especially those related to time (history, maturation, and regression) and those related to make-up of the groups (selection effects). Such control may be at the expense of making the situation too artificial.

A. RANDOMIZED GROUPS DESIGN OR BETWEEN-GROUPS DESIGN

Each research participant is randomly assigned to one group and gets only one level of the independent variable. There may be pre-tests and post-tests or only post-tests. This design can eliminate selection, history, and maturation effects.

B. REPEATED MEASURE DESIGN or WITHIN-SUBJECT DESIGN

Each research participant gets all levels of the IV. Treatment orders must be counterbalanced to eliminate order effects.

C. MIXED MODEL DESIGNS OR COMPLEX DESIGNS

These designs combine randomized groups and repeated measures designs. For instance, there may be two IVs, one measured between groups and one measured within groups.

SINGLE-SUBJECT DESIGNS

Single-subject designs, or so-called "N=1" designs, are used most often in clinical psychology situations with behavior modification. They have also been used in basic research on experimental analysis of behavior using behaviorist model. Note that this is experimental research in a controlled setting with a single independent variable; it is not case study research.

In many clinical situations, it is not possible or desirable to gather large groups of subjects. Here you may choose a single-subject design. It can provide strong internal validity, but typically suffers from low external validity.

In each design, a series of regular and planned observation is taken over a period of time. Observations are divided into sessions of baseline and treatment conditions.

I. ABA OR REVERSAL DESIGN

A number of observations with no treatment (the A or baseline sessions) are followed by a number of observations with treatment (B). If the treatment is successful, there should be improvement on the DV in the B sessions. To show that the improvement is the effect of the IV and not maturation or history, another no-treatment or A session is given. If the improvements reverse, the research hypothesis is supported.

In the example, we could observe a client each day or a week. Then we would introduce the new therapy for two weeks and see if there is improvement. If there is, we could take away the therapy and see if the improvement goes away. If they do, we can be confident that the therapy works.

II. ABAB DESIGN

This is just like the ABA Design, only another series of B or treatment sessions is added. For ethical reasons, it is often desirable to leave subjects with the advantage of a successful treatment. The ABAB design does this. It also provides a replication of the AB comparison.

Although single-case designs were originally used typically to study a small number of very discrete behaviors, they are now used to study increasingly complex patterns of behavior.

For example, in 1997, a group of researchers used a single-case design to evaluate the effects of family-based behavioral treatment for a child with severe disabilities and severe behavior problems. This study focused on a program to change self-injurious, aggressive, and destructive behaviors in a 4-year-old girl. The researchers used a multiple baseline approach in which they implemented several different interventions through the parents' behavior (e.g., changing the ways that the parents responded to the child's self-injuries) with their daughter in different settings (e.g., dinner at home, in restaurants, in the grocery store).

The frequency of the girl's problem behaviors was assessed during the baseline condition, during the training period in which the parents were taught to respond differently to her behavior, and during

follow-up. The rates of the girl's problem behaviors decreased in each of the different settings following the program to change the ways that her parents responded to these behaviors.

CONCLUSION TO EXPERIMENTAL DESIGNS

Which design is best? There is sentiment among some researchers that experimental research designs are superior to descriptive or correlational approaches because only experimental designs can be used to determine true causal, relationships. This view is a misrepresentation of the broad scope of the research process, however, because each type of research design is useful for addressing some questions and hypotheses and not others.

Clinical psychologists are often interested in observing things as they occur in the natural environment and descriptive and correlational designs are best suited for this purpose. In other instances, clinical psychologists are interested in determining cause-and-effect relations among variables or in determining the effects of a specific form of treatment, goals that are addressed only with experimental designs.

Furthermore, ethical constraints often limit the types of research designs that can be used. Researchers cannot ethically cause significant distress or psychopathology to occur in participants in human research. The first priority of any researcher is the welfare of the individuals who participate in the research, and any risks that are involved must be within reasonable limits and must be justified by the potential benefits of the research. As a result, much of the research on the causes and course of psychopathology must rely on descriptive and correlational designs combined with analogue or animal research that uses experimental designs to test similar hypotheses.

THE RESEARCH PROCESS

The process of research in clinical psychology, like research in other areas of psychology and in other sciences, involves the unfolding of a story. The story begins with a question that, when framed properly, can be answered with an acceptable degree of certainty. Pursuing the answers to questions involves six broad steps; generation of hypotheses, selection of measures of key variables, selection of a research design, selection of a sample, hypothesis testing, and interpretation and dissemination of results. Throughout this process, it is imperative that researchers follow clear guidelines and standards for ethical treatment of participants (human or animal) in research.

1. GENERATING HYPOTHESES

Any piece of research begins with a question that needs to be answered. Why do more women than men experience clinical depression? What is the role of human genetics in the development of infantile autism? How stable are certain personality characteristics, such as extroversion or sociability, across the life span? What role does poverty play in the development of psychopathology? Is psychotherapy effective in the treatment of eating disorders such as Bulimia Nervosa and Anorexia Nervosa? These questions are among the thousands that have been posed and examined through research by clinical psychologists.

In order to serve as the focus of scientific research, a question needs to be refined into a hypothesis. A hypothesis goes further than a question in that it reflects the researcher's best educated idea about the expected answer to a question. Furthermore, a hypothesis can be tested to determine if the null hypothesis (i.e., that there is no difference or no relationship between the variables being studied) can be rejected with some degree of certainty or statistical probability. Some types of descriptive research (e.g., epidemiological research to determine the prevalence of different forms of psychopathology) may not be framed in terms of hypotheses. Instead, descriptive research attempts to provide information that defines the extent or parameters of a particular behavior, personality characteristic, or psychological disorder.

Research that is aimed to predict, explain, or change human behavior, however, is best represented as a specific hypothesis that can be tested. The statistical methods employed by psychologists allow researchers to determine the probability that the null hypothesis is false and that a hypothesized relationship among different variables did not occur simply by chance.

Research hypotheses can emerge from at least three sources: **careful observations of a clinical case** or cases, a **theory concerned with human behavior or psychopathology**, and the **results of previous research**. A skilled clinical researcher is first and foremost an astute observer of human behavior. One of the richest and most relevant sources of observations is the interactions of clinical psychologist with their clients or patients. For example, a clinical psychologist who treats aggressive and noncompliant children may observe that these children frequently come from families in which there is a high degree of conflict and anger between the parents. This observation raises the possibility that conflict and discord in marital relationships can contribute to childhood aggression and noncompliance. Equally plausible, however, is the hypothesis that aggressive and disobedient behavior by a child can contribute to tension and arguments between parents. In this way, observations of individual cases raise questions whose answers require other methods and additional information.

A theory can serve as an important source of hypotheses about a variety of clinical problems. A theory serves as a road map for a clinical psychologist, providing a sense of what to expect and why it should be expected. Nevertheless, the central propositions of any theory cannot be left as mere abstractions. A strong theory must lend itself to empirical evaluation and testing. For example, operant behavior theory predicts that any behavior that is followed by positive consequences should increase in frequency. Thus, a researcher can do more than asking a question about the effects of positive consequences on behavior.

The researcher can hypothesize that a variable ratio pattern of reinforcement will increase behavior more rapidly than no reinforcement. This hypothesis could then be tested in relation to clinically relevant behaviors, such as the development and maintenance of a child's disruptive or noncompliant behavior.

Hypotheses can also emerge directly from the findings of previous research. This includes studies carried out by other researchers as well as an investigator's own previous work. Knowledge of prior research is important to avoid pursuing the answers to questions that have already been resolved, to learn from the tribulations and mistakes of others, and to draw on the findings of previous studies as an important source of future hypotheses. Keeping abreast of research in psychology has become a daunting task, however, as the field has grown to include thousands of active researchers publishing their findings in hundreds of journals around the world. Computerized literature search programs such as PsychLit, PsychInfo, and MedLine have been enormously helpful in expediting the process of bringing oneself up to date on current research on a topic. But these methods are not a substitute for reading broadly in many areas of psychology to develop hypotheses that reflect basic as well as applied research.

Some of the best examples of programmatic research in clinical psychology involve the use of basic research on a clinical disorder to form the foundation for interventions to treat or prevent the problem. For example, research on the factors that place children at risk for the development of aggressive and violent behavior problems has led to the development of interventions in childhood to prevent the onset of these problems.

MEASURING KEY VARIABLES

2. SELECTION OF MEASURES

Once a set of hypotheses has been developed, the next challenge for the researcher is to determine how to measure the key variables, or constructs, that are the focus of the study. Measurement involves assessment of characteristics of people's thoughts emotions, behavior, and physiology and the environments in which they function. A number of difficult decisions must be made with regard to the measurement of people and environments. First, the aspects of the person or the environment that are most central to the research goals and hypotheses must be determined.

A researcher however, cannot, measure everything that might be relevant to the question at hand. Measurement of a large number of variables is impractical, because participants in research often cannot or will not invest the amount of time that a researcher desires. In general, researchers should measure only those factors that are most important to their hypotheses.

Second, specific methods must be selected to measure the variables of interest in the study. Assessment methods used in clinical research include direct observations (e.g., observations of parents and children interacting with each other); self-reports by participants in the research (e.g., self-reports of symptoms of depression and anxiety); measures of physiological reactivity and recovery (e.g. heart rate variability, skin conductance); and performance on structured experimental tasks (e.g., continuous performance tasks). Each of the methods of measurement has its inherent strengths and weaknesses. For example, self-reports from participants are necessary to assess certain aspects of thoughts and emotions because there are aspects of private experience that are not accessible any other way.

On the other hand, self-reports are subject to certain types of problems, including biases in the ways that individuals may want to present them-selves to others, the inability to accurately report on certain aspects of one's own thoughts and emotions, and unwillingness to disclose certain types of information. Observational methods are strong in terms of their objectivity and ability to measure behavior as it occurs in response to specific events or conditions in the environment. Observations cannot be used, however, to measure private thoughts and internal emotional states. One solution to the problems

inherent in each form of measurement is to use different types of measures in the same study to determine the degree to which the findings converge across different types of measurement as opposed to findings that are unique to one type of measure.

Third, the researcher must determine if tried-and-true measures of these constructs have been developed and used in previous research, or if new measures need to be constructed to pursue the goals of this study. Whenever possible, researchers use measures that have established levels of reliability and validity and (when appropriate) that have normative data available on populations that are similar to the participants in the study. These factors provide a degree of assurance that the measure can be trusted - that the results are to some degree consistent and accurate. In some instances, a researcher will want to measure a variable for which an adequate instrument is not available. In these cases, the researcher is faced with the task of developing and validating a new measure in order to carry out the study. It is not acceptable, however, to simply employ a new measure or technique for the purposes of the study without paying careful attention to establishing its reliability and validity.

An example of these difficult, decisions can be found in research on the nature of anxiety disorders. Anxiety can be measured at a number of different levels, including the experience and emotions of the individual (e.g., "I feel tense and anxious"), observations made by others of overt manifestations of anxiety (e.g., "I could see his hands were shaking and I could hear a trembling in his voice"), and measures of physiological arousal (e.g., elevated heart rate, blood pressure, skin conductance). None of these approaches to measurement represents the "right" way to assess anxiety, and the issue is clouded by the fact that the three approaches often yield different results.

For example, some individuals may experience high physiological arousal but do not report subjective experiences of fear or anxiety, and conversely, some individuals with very low levels of arousal feel very anxious. The failure of different types of measures to converge (i.e., to provide the same information on the variable that is being measured) does not imply that any one of the measures is invalid. However; it presents the researcher with a challenge in the interpretation of the different sources of information.

3. SELECTING A RESEARCH DESIGN

Armed with a clear set of hypotheses and appropriate measures to assess the important variables under investigation, a clinical psychologist is prepared to design a study. There are four basic types of research designs (but many variations within each) from which to choose: **descriptive designs**, **correlational designs**, **experimental designs**, and **single-case designs**. Generally, the two main methods of data collection are **survey method** and **observational method**. Moreover, all these designs can be **cross-sectional** (one point in time) or **longitudinal** (over the course of time). The choice of which design and which data-collection method to use depends on the nature of the question being asked and on ethical and practical limitations that may constrain the research. No one type of research design is inherently superior to others - each is simply better suited to answer some questions than others.

RESEARCH METHODS

There are two main categories of research methods, both with their own respective sub-categories. These are

1. SURVEY METHODS

2. OBSERVATIONAL METHODS

1. SURVEY RESEARCH METHODS

Survey methods are used to obtain people's responses and opinions regarding an issue or problem. Types of survey include computerized on-line surveys, telephonic surveys, voting polls, personal interviews, use of questionnaires etc.

1. THE PURPOSE OF SURVEY RESEARCH METHODS

The aim of survey research is to measure certain attitudes and/or behaviors of a population or a sample. The attitudes might be opinions about a political candidate or feelings about certain issues or practices.

2. FOCUS

Survey research focuses on naturally occurring phenomena. Rather than manipulating phenomena, survey research attempts to influence the attitudes and behaviors it measures as little as possible. Most often, respondents are asked for information.

3. TYPES OF DATA

Survey research is primarily quantitative, but qualitative methods are sometimes used, too.

4. SAMPLING

Once in a while, a researcher may be able to gather data from all members of a population. For example, if you want to know what a neighborhood thinks about a local land use issue, you may be able to measure all residents of the neighborhood if it is not too big. However, most of the time, the population is so large that researchers must sample only a part of the population and make conclusions about the population based on the sample. Because of this, gaining a representative sample is crucial in survey research.

SOME COMMON SAMPLING STRATEGIES

SIMPLE RANDOM SAMPLING

Members of the population are drawn at random to be in the sample. Each member of the population has an equal chance of being in the sample. Think of putting the names of all the possible survey respondents into a hat and drawing them out one by one to build your sample.

STRATIFIED RANDOM SAMPLING

Strata (sub-groups) are identified and respondents selected at random from within the relevant strata. For example, if I want to know the extent of certain health behaviors among the students at my college, I would identify the relevant dimensions. These might be day or night students (since these are two fairly distinct sub-populations) and major (since Letters, Arts, and Sciences majors tend to be different from Business majors). Thus, I would have 4 sub-groups: day students in Business, day students in Letters, Arts and Sciences, night students in Business, and night students in Letters, Arts and Sciences. Then, I would randomly choose respondents from within each of these four groups. The step of stratifying gives me a more targeted sampling strategy.

PROPORTIONATE SAMPLING

This imposes the constraint that the sample must reflect the same proportions of sub-groups as is found in the population. For example, I could insist that my samples have the same proportion of traditional-age students (18-22) and non-traditional students.

NON-PROBABILITY SAMPLING

This is a procedure in which the sampling strategy does not give a representative sample. Examples include convenience sampling, where the sample is made up of those whom it is most convenient to survey, say one's friends or people who pass by a certain street corner; self-selected sampling, in which

the respondents get to choose whether to be included in the survey, such as leaving questionnaires at a table in a public place; and snowball sampling, in which previous respondents recruit subsequent respondents.

Note that although these non-probability sampling strategies do not yield representative samples, they may still be useful to researchers in gaining a preliminary picture or as a pilot project.

5. POSSIBLE SOURCES OF BIAS IN SURVEY RESEARCH

DEMAND CHARACTERISTICS

Respondents tend to say what they think the researcher wants to hear.

ACQUIESCENCE

Respondents tend to say "yes" more easily than "no."

REACTIVITY

Thinking about the questions tends to change respondents' opinions. For example, you may not have thought much about environmental damage until a survey asks for your opinions on rainforest depletion.

RESPONSE BIAS

Some people tend to answer more positively or in more extreme terms. If there is a consistent tendency for one group to give more extreme responses and a consistent tendency for another group to give more middle-of-the-road responses, we might mistakenly conclude they have different opinions. In fact, we may only be observing a bias in their response tendencies.

2. OBSERVATIONAL METHODS

The most basic and pervasive of all research methods is observation. Experimental, case study, and naturalistic approaches all involve making observations of what someone is doing or has done. Types of observational methods include the following:

a. UNSYSTEMATIC OBSERVATION

Casual observation does little by itself to establish a strong base of knowledge. However, it is through such observation that we develop hypotheses that can eventually be subjected to test. For example, suppose a clinician notes on several different occasions that when a patient struggles or has difficulty with a specific item on an achievement test, the effect seems to carry over to the next item and adversely affect performance.

This observation leads the clinician to formulate the hypothesis that performance might be enhanced by making sure each failure item is followed by an easy item on which the patient will likely succeed. This should help build the patient's confidence and thus improve performance. To test this prediction, the clinician might administer an experimental version of the achievement test, in which difficult items are followed by easy items. It would then be relatively easy to develop a study that would test this hypothesis in a representative sample of clients.

b. NATURALISTIC OBSERVATION

Though carried out in real-life settings, naturalistic observation is more systematic and rigorous. It is neither casual nor free-wheeling, but carefully planned in advance. However, there is no real control exerted by the observer, who is pretty much at the mercy of freely flowing events. Frequently, observations are limited to a relatively few individuals or situations. Thus, it may be uncertain how far one can generalize to other people or other situations. It is also possible that in the midst of observing or recording responses, the observer may unwittingly interfere with or influence the events under study.

An example of a study using the naturalistic observation method might be an investigation of patient behavior in a psychiatric hospital. Perhaps a particular unit in this hospital is composed of patients who are scheduled to undergo electroconvulsive therapy (ECT) that day. The clinician's job is to focus on ten patients and observe each one for 2 minutes every half-hour. This observational study might yield interesting data about the reactions of patients prior to ECT. But with only ten patients from this particular hospital, can wide generalizations be made? Are these patients' reactions similar to those in other hospitals or other units where the overall atmosphere may be very different? Or were the patients aware of the observer's presence and could they have altered their customary reactions in order to somehow impress him or her?

Investigators committed to more rigorous experimental methods sometimes condemn naturalistic observation as too uncontrolled. But this judgment may be too harsh.

As with unsystematic observation, this method can serve as a rich source of hypotheses that can be subjected to careful scrutiny later. Naturalistic observations do get investigators closer to the real phenomena that interest them. Such observations avoid the artificiality and contrived nature of many experimental settings. For example, regardless of their feelings about psychodynamic theory, most acknowledge that Freud's clinical observation skills were extraordinary. Freud used his own powers of observation to construct one of the most influential and sweeping theories in the history of clinical psychology. It is important to recall that Freud had available no objective tests, no computer printouts, and no sophisticated experimental methods. What he did possess was the ability to observe, interpret, and generalize in an impressive fashion.

c. CONTROLLED OBSERVATION

To deal in part with the foregoing criticisms of unsystematic and naturalistic observation, some clinical investigators employ controlled observation. While the research may be carried out in the field or in relatively natural settings, the investigator exerts some degree of control over the events. Controlled observation has a long history in clinical psychology. For example, it is one thing to have patients tell clinicians about their fears or check off items on a questionnaire. However, Bernstein, and Nietzel (1973) studied the nature of snake phobias by placing study participants in the presence of real snakes and then varying the distance between participant and snake. This controlled observation enabled them to gain some real insight into the nature of the participants' reactions. Controlled observation can also be used to assess communication patterns between couples or spouses. Instead of relying on distressed couples' self-reports of their communication problems, researchers may choose to actually observe communications styles in a controlled setting.

Specifically, partners can be asked to discuss and attempt to resolve a moderate-sized relationship problem of their choosing (for example, partner spends too much money on unnecessary things) while researchers observe or videotape the interaction behind a one-way mirror. Although not a substitute for naturalistic observation of conflict and problem solving in the home, researchers have found this controlled observation method to be a useful and cost-effective means of assessing couples' interaction patterns.

d. CASE STUDIES

The case study method involves the intensive study of a client or patient who is in treatment. Under the heading of case studies we include material from interviews, test responses, and treatment accounts. Such material might also include biographical and autobiographical data, letters, diaries, life-course information, medical histories, and so on. Case studies, then, involve the intensive study and description of one person. Such studies have long been prominent in the study of abnormal behavior and in the description of treatment methods. Their great value resides in their richness as potential sources of understanding and as hypothesis generators. They can serve as excellent preludes to scientific investigation.

Nothing will ever likely supplant the case study as a way of helping clinicians to understand that unique patient who sits there before them. As Allport (1961) so compellingly argued, individuals must be studied individually. Case studies have been especially useful for (1) providing descriptions of rare or unusual phenomena or novel, distinctive methods of interviewing, assessing, or treating patients; (2) disconfirming "universally" known or accepted information; and (3) generating testable hypotheses.

There is, of course, a downside to case study methods. For example, it is difficult to use individual cases to develop universal laws or behavioral principles that apply to everyone. Likewise, one case study cannot lead to cause-effect conclusions because clinicians are not able to control important variables that have operated in that case. For example, one patient may benefit enormously from psychodynamic therapy for reasons that have less to do with the therapy method than with the personality characteristics of that patient. Only subsequent controlled research can pin down the exact causes of, or factors influencing change.

CROSS-SECTIONAL VERSUS LONGITUDINAL APPROACHES

Another way of classifying research studies is by considering whether the studies are cross-sectional or longitudinal in nature. A cross-sectional design is one that evaluates or compares individuals, perhaps of different age groups, at the same point in time. A longitudinal design follows the same subjects over time.

The basic format of these two approaches is shown in the following figure. In this example, row (a) illustrates the longitudinal design and column (b) the cross-sectional design.

Cross-sectional approaches are correlational, because the investigator cannot manipulate age nor can participants be assigned to different age groups. Because there are different participants in each age group, we cannot assume that the outcome of the study reflects age changes; it only reflects differences among the age groups employed. These differences could be due to the eras in which participants were raised rather than age by itself. For example, a group of 65-year-olds might show up as more frugal than a group of 35-year-olds. Does this mean that advancing age promotes frugality? Perhaps. But it might simply reflect the historical circumstance that the 65-year-olds were raised during the Great Depression when money was very hard to come by.

Longitudinal studies are those in which we collect data on the same people over time. Such designs allow us to gain insight into how behavior or mental processes change with age. In the interpretive sense, longitudinal studies enable investigators to better speculate about time-order relationships among factors that vary together. They also help eliminate the third variable problem that so often arises in correlational studies. For example, suppose we know that states of depression come and go over the years. If depression is responsible for the correlation between significant weight loss and decreased self-confidence, then both weight loss and decline in self-confidence should vary along with depressive states.

There are, of course many variations in cross-sectional and longitudinal designs. In the case of longitudinal studies, however, the main problems are practical ones. Such studies are costly to carry out, and they require great patience and continuity or leadership in the research program. Sometimes, too, researchers must live with design mistakes made years earlier or put up with outmoded research and assessment methods. Because longitudinal research is expensive in both time and money, it is not used as often as it should be. For these reasons, research in the developmental aspects or psychopathology has long suffered. Still, it is to be hoped that there will be a return to those strategies that deal with psychopathology, treatment, or personality over extended periods of time, using a variety of measures. Too often, we have been captives of a cross-sectional methodology that sometimes seems to focus exclusively on 50-minute experiments. Such strategies have promoted a "snapshot" view of human behavior and personality that has done little to help us understand the coherence and organization of human behavior.

4. SELECTING A SAMPLE

Who should participate in a study once it has been designed? Selection and recruitment of a sample is important to the ultimate generalizability (external validity) of the research findings. If the sample is not a representative sample of the larger population from which it is drawn, the results of the study may be biased or influenced by the characteristics of the sample. For example, a sample may differ from the general population in terms of demographic characteristics, such as sex, age, education level, income, and ethnic or racial background. These characteristics may influence the findings of the study, because the results may differ as a function of one or more of these characteristics.

In research with clinical samples, it is additionally important to determine the extent to which the sample is representative of the clinical population to which the results are to be generalized.

5. TESTING HYPOTHESES

STATISTICAL VERSUS PRACTICAL SIGNIFICANCE

Once a study has been completed and the data are in hand, psychologists rely on the use of inferential statistics to evaluate the degree to which the null hypothesis has been rejected. The specific type of statistical procedure, which is used, depends on the research design that was employed. After a statistic (such as a correlation coefficient) has been calculated, it can be determined whether the obtained number is significant.

Traditionally, if it is found that the obtained value (or a more extreme value) could be expected to occur by chance alone less than 5 times out of 100, it is deemed statistically significant. Such an obtained value is said to be significant at the .05 level, usually written as $p < .05$. The larger the statistical value, the more likely it is to be significant. But when large numbers of participants are involved, even relatively small statistical values can be significant. With 180 participants, a correlation of .19 will be significant; when only 30 participants are involved, a correlation of .30 would fail to be significant.

Therefore, it is important to distinguish between statistical significance and practical significance when interpreting statistical results. The correlation of .19 may be significant, but the magnitude of the relationship is still quite modest. For example, it might be true that in a study involving 5000 second-year graduate students in clinical psychology across the nation, there is a correlation of .15 between their GRE scores and faculty ratings of academic competence. Even though the relationship is not a chance one, the actual importance is rather small. Most of the variance in faculty ratings is due to factors other than GRE scores.

In some cases, a correlation of .15 may be judged important, but in many instances, it is not. At the same time, we should remember that accepting significance levels of .05 as non-chance represents a kind of scientific tradition - it is not sacred. Other information may persuade us, in certain cases such as clinical settings that significance levels of .07 or .09, for example, should be taken seriously.

In other words, clinical researchers need to look beyond the statistical significance of the findings to understand the statistic's meaning for the people and problems that are the focus of clinical research.

6. INTERPRETING AND DISSEMINATING FINDINGS

The final step in the research process is to place the meaning or implications of a study in a broader context. What are the implications of the findings for understanding the nature, causes, and course of psychological problems? What are the implications for the prevention or treatment of psychopathology? What do the results mean for establishing public policy related to mental health?

A first step in the process of sharing the results of research is to submit them to review for publication in peer-reviewed professional journals. Articles that are published in peer-reviewed scientific journals have been evaluated by other researchers and experts in the field prior to publication. The review process ensures that the work that is published meets certain accepted criteria for scientific quality. The most rigorous journals in clinical psychology include *Journal of Consulting and Clinical Psychology*, *Journal of Abnormal Psychology*, *Behavior Therapy* etc.

The findings of clinical research are not designed solely for advancing the science of clinical psychology, however. Clinical research is also designed to improve the conditions of people with psychological problems. Therefore, researchers have an obligation to translate their findings into information that can be used for the general good. Research results should be communicated to the public, to practicing psychologists, and to officials who formulate mental health policies and allocate money for mental health programs. Practicing psychologists and their clients as well as policy makers are hungry for information that will help them understand the nature, causes, and treatment of psychological problems.

SUMMARY AND CONCLUSIONS

The foundation of clinical psychology lies in the research that has been generated on the nature and causes of psychopathology, the development of measures of personality and behavior, and the evaluation of the effects of psychotherapy and other forms of intervention to relieve or prevent psychological distress. The research process follows a series of steps that include the generation of hypotheses, the choice of measures, the selection of a research design, the identification of a sample, the testing of the hypothesis, and the interpretation and dissemination of findings. Clinical psychologists use several different types of research designs, including single-case designs, descriptive methods, correlational designs, and experimental methods. Using both correlational and experimental methods to conduct studies in the laboratory and in the natural environment, clinical psychologists have made significant contributions to the scientific study of human behavior.

RESEARCH ETHICS

Just like clinical practice and all other areas of psychology, psychological research, too, involves important ethical considerations. Like patients, research participants have rights, and investigators have responsibilities to them.

In 1992, the American Psychological Association published an expanded and updated set of ethical standards for research with human participants (APA, 1992). We offer only a brief overview here. These standards require that investigators:

1. Plan research according to recognized standards of scientific competence and ethical principles
2. Implement safeguards for the welfare of participants, others that may be affected by the research, and animal subjects
3. Retain responsibility for ensuring ethical practices in research
4. Comply with pertinent federal and state law and regulations
5. Gain appropriate approval from host institutions or organizations before conducting research
6. Establish clear and fair agreements with their research participants so that the rights and obligations of each party are clarified

7. Obtain the informed consent of research participants, using language that is easily understandable to them, and document their consent
8. Take great care, in offering inducements for research participation, that the nature of the compensation (such as professional services) is made clear and that financial or other types of inducements are not be so excessive as to coerce participation
9. Use deception as part of their procedures only when it is not possible to use alternative methods
10. Protect participants from any mental and physical discomfort, harm, and danger that might arise during the research
11. Inform research participants of the anticipated use of the data and of the possibility of sharing the data with other investigators or any unanticipated future uses
12. Minimize the invasiveness of research procedures
13. Provide participants with information at the close of the research to erase any misconceptions that may have arisen
14. Treat animal subjects humanely and in accordance with federal, state, and local laws, as well as with professional standards

Several of these points require further comment.

INFORMED CONSENT

Good ethical practice as well as legal requirements demand that participants give their formal informed consent (usually in writing) prior to their participation in research. Researchers inform the participants of any risks, discomforts, or limitations on confidentiality. Further, researchers inform the participants of any compensation for their participation. In the process, the researcher agrees to guarantee the participant's privacy, safety, and freedom to withdraw. Unless participants know the general purpose of the research and the procedures that will be used, they cannot fully exercise their rights.

CONFIDENTIALITY

Participant's individual data and responses should be confidential and guarded from public scrutiny. Instead of names, code numbers are typically used to protect anonymity. While the results of the research are usually open to the public, they are presented in such a way that no one can identify a specific participant's data. Finally, clinical psychologists must obtain consent before disclosing any confidential or personally identifiable information in the psychologist's writings, lectures, or presentations in any other public media (such as a television interview).

DECEPTION

Sometimes, the purpose of the research or the meaning of a participant's responses is withheld. Such deception should be used only when the research is important and there is no alternative to the deception (in other words, when veridical information would compromise participants' data). Deception should never be used lightly. When it is used, extreme care must be taken that participants do not leave the research setting feeling exploited or disillusioned. It is important that careful debriefing be undertaken so that participants are told exactly why the deception was necessary. We do not want participants' levels of interpersonal trust to be shaken. Clearly, it is very important how we obtain informed consent when deception is involved.

An example of the need for deception in a study might be an experiment in which it is predicted that the viewing of gun magazines (or other materials associated with potential violence) will lead to increased scores on a questionnaire measuring hostility. All participants are told that the experiment is one focusing on short-term memory, and they will be completing a memory task on two occasions separated by a 15-minute waiting period during which they will be reading magazine articles. All participants first complete baseline measures (including the hostility questionnaire). Next, all participants complete a computer-administered memory task. During the waiting period, the experimental group is told to read selections from a gun magazine that is made available in the lab; the control group is told to read selections from a nature magazine (neutral with regard to violent imagery). All participants later complete the computer-administered memory task again. Finally, all participants complete the battery of self-report instruments a second time.

We are not so much interested in the viability of this hypothesis as we are in the need for some deception in the experiment. As you can see, to tell the participants the real purpose of the experiment would likely influence their responses to the questionnaires (especially to the one measuring hostility). Therefore, the investigator might need to introduce the experiment as one that is focusing on short-term memory.

DEBRIEFING

Because participants have a right to know why researchers are interested in studying their behavior, a debriefing at the end of the research is mandatory. It should be explained to participants why the research is being carried out, why it is important, and what the results have been. In some cases, it is not possible to discuss results because the research is still in progress. But subjects can be told what kinds of results are expected and that they may return at a later date for a complete briefing if they wish.

FRAUDULENT DATA

It hardly seems necessary to mention that investigators are under the strictest standards of honesty in reporting their data. Under no circumstances may they alter obtained data in any way. To do so can bring charges of fraud and create enormous legal, professional, and ethical problems for the investigator. Although the frequency of fraud in psychological research has so far been minimal, we must be on guard. There is no quicker way to lose the trust of the public than through fraudulent practices.

THE CONCEPT OF ABNORMAL BEHAVIOR & MENTAL ILLNESS

Clinical psychology is usually thought of as an applied field. Clinicians attempt to apply empirically supported psychological principles to problems of adjustment and abnormal behavior. Typically this involves finding successful ways of changing the behavior, thoughts, and feelings of clients. In this way, clinical psychologists lessen their clients' maladjustment or dysfunction or increase their levels of adjustment.

Before clinicians can formulate and administer interventions, however, they must first assess their clients' symptoms of psychopathology and levels of maladjustment. Interestingly, the precise definitions of these and related terms can be elusive. Further, the manner in which the terms are applied to clients is sometimes quite unsystematic.

Clinical psychology has moved beyond the primitive views that defined mental illness as possession by demons or spirits. Maladjustment is no longer considered a state of sin. The eighteenth and nineteenth centuries ushered in the notion that "insane" individuals are sick and require humane treatment. Even then, however, mental health practices could be bizarre, to say the least. Clearly, clinical psychologists' contemporary views are considerably more sophisticated than those of their forebears. Yet many view current treatments such as electroconvulsive therapy (ECT) with some skepticism and concern. Still others may see the popularity of treatments using psychotropic medications (such as antipsychotic, antidepressant, anti-manic, or anti-anxiety medications) as less than enlightened.

Finally, many forms of "psychological treatment" (for example, primal scream therapy, age regression therapy) are questionable at best. All of these treatment approaches and views are linked to the ways clinical psychologists decide who needs assessment, treatment, or intervention, as well as the rationale for providing these services. These judgments are influenced by the labels or diagnoses often applied to people.

WHAT IS ABNORMAL BEHAVIOR?

Ask ten different people for a definition of abnormal behavior and you may get ten different answers. Some of the reasons that abnormal behavior is so difficult to define are (1) no single descriptive feature is shared by all forms of abnormal behavior, and no one criterion for "abnormality" is sufficient; and (2) no discrete boundary exists between normal and abnormal behavior. Many myths about abnormal behavior survive and flourish even in this age of enlightenment. For example, many individuals still equate abnormal behavior with (1) bizarre behavior, (2) dangerous behavior, or (3) shameful behavior.

In this section, we will examine in some detail three proposed definitions of abnormal behavior: (1) conformity to norms, (2) the experience of subjective distress, and (3) disability or dysfunction. We will discuss the pros and cons of each definition. Although each of these three definitions highlights an important part of our understanding of abnormal behavior; each definition, by itself, is incomplete.

A. CONFORMITY TO NORMS: STATISTICAL INFREQUENCY OR VIOLATION OF

SOCIAL NORMS

When a person's behavior tends to conform to prevailing social norms or when this particular behavior is frequently observed in other people, the individual is not likely to come to the attention of mental health professionals. However, when a person's behavior becomes patently deviant, outrageous, or otherwise nonconforming, then he or she is more likely to be categorized as "abnormal." Let us consider some examples.

THE CASE OF BILLY A

Billy is now in the second grade. He is of average height and weight and manifests no physical problems. He is somewhat aggressive and tends to bully children smaller than himself. His birth was a normal one, and although he was a bit slow in learning to walk and talk, the deficit was not marked. The first grade was difficult for Billy, and his progress was slow. By the end of the school year, he was considerably behind the rest of the class. However, the school officials decided to pass him anyway. They reasoned that he was merely a bit slow in maturing and would "come around" shortly. They noted that his status as an only child, a pair of doting parents, a short attention span, and aggressiveness were all factors that combined to produce his poor school performance.

At the beginning of the second grade, Billy was administered a routine achievement test, on which he did very poorly. As a matter of school policy, he was referred to the school psychologist for individual testing and evaluation. Based on the results of the Stanford-Binet Intelligence Scale, a Draw-a-Person Test, school records, and a social history taken from the parents, the psychologist concluded that Billy suffered from mental retardation. His IQ was 64 on the Stanford-Binet and was estimated to be 61 based on the Draw-a-Person Test. Further, a social maturity index derived from parental reports of his social behavior was quite low.

THE CASE OF MARTHA L

Martha seemed to have a normal childhood. She made adequate progress in school and caused few problems for her teachers or parents. Although she never made friends easily, she could not be described as withdrawn. Her medical history was negative. When Martha entered high school, changes began. She combed her hair in a very severe, plain style. She chose clothing that was quite ill fitting and almost like that worn 50 years ago. She wore neither makeup nor jewelry of any kind. Where before she would have been hard to distinguish from the other girls in her class, she now easily stood out.

Martha's schoolwork began to slip. She spent hours alone in her room reading the Bible. She also began slipping notes to other girls that commented on their immorality when she observed them holding hands with boys, giggling, dancing; and so on. She attended religious services constantly; sometimes on Sundays she went to services at five or six separate churches. She fasted frequently and decorated her walls at home with countless pictures of Christ, religious quotations; and crucifixes.

When Martha finally told her parents that she was going to join an obscure religious sect and travel about the country (in a state of poverty) to bring Christ's message to the country, they became concerned and took her to a psychiatrist. Shortly afterward, she was hospitalized. Her diagnosis varied, but it included such terms as schizophrenia, paranoid type; schizoid personality; and schizophrenia, undifferentiated type.

Both of these cases are examples of individuals commonly seen by clinical psychologists for evaluation or treatment. The feature that immediately characterizes both cases is that Billy's and Martha's behaviors violate norms. Billy may be considered abnormal because his IQ and school performance depart considerably from the mean. This aspect of deviance from the norm is very clear in Billy's case, because it can be described statistically and with numbers. Once this numerical categorization is accomplished, Billy's assignment to the deviant category is assured. Martha also came to people's attention because she is different. Her clothes, appearance, and interests do not conform to the norms typical of females in her culture.

ADVANTAGES OF THIS DEFINITION

The definition of abnormality in terms of statistical infrequency or violation of social norms is attractive for at least two reasons.

1. Cutoff Points: The statistical infrequency approach is appealing because it establishes cutoff points that are quantitative in nature. If the cutoff point on a scale is 80 and individual scores a 75, the decision to label that individual's behavior as abnormal is relatively straightforward. This principle of statistical deviance is frequently used in the interpretation of psychological test scores. The test authors designate a cutoff point in the test manual often based on statistical deviance from the mean score obtained by a

"normal" sample of test-takers, and scores at or beyond the cutoff are considered "clinically significant" (that is, abnormal or deviant).

2. Intuitive Appeal: It may seem obvious to us that those behaviors we ourselves consider abnormal would be evaluated similarly by others. The struggle to define exactly what abnormal behavior is does not tend to bother us because, as a Supreme Court justice once said about pornography, we believe that we know it when we see it.

PROBLEMS WITH THIS DEFINITION

Conformity criteria seem to play a subtle yet important role in our judgments of others. However, although we must systematically seek the determinants of the individual's nonconformity or deviance, should resist the reflexive tendency to categorize every nonconformist behavior as evidence of mental health problems. Conformity criteria, in fact, have a number of problems.

1. Choice of Cutoff Points: Conformity oriented definitions are limited by the difficulty of establishing agreed-upon cutoff points. As noted previously, a cutoff is very easy to use once it is established. However, very few guidelines are available for choosing the cutoff point. For example, in the case of Billy, is there some thing magical about an of 64?

Traditional practice sets the cutoff point at 70. Get an IQ below 70 and you may be diagnosed with mental retardation. But is a score of 69 all that different from a score of 72? Rationally justifying such arbitrary IQ cutoff points is difficult. This problem is equally salient in Martha's case. Are five crucifixes on the wall too many? Is attendance at three church services per week acceptable?

2. The Number of Deviations: Another difficulty with nonconformity standards is the number of behaviors that one must evidence in order to earn the label "deviant." In Martha's case, was it just the crucifixes, or was it the total behavioral configuration—crucifixes, clothes, makeup, withdrawal, fasting, and so on? Had Martha manifested only three categories of unusual behavior, would we still classify her as deviant?

3. Cultural Relativity: Martha's case, in particular, illustrates an additional point. Her behavior was not deviant in some absolute sense. Had she been a member of an exceptionally religious family that subscribed to radical religious beliefs and practices, she might never have been classified as maladjusted. In short, what is deviant for one group is not necessarily so for another. Thus, the notion of cultural relativity is important. Likewise, judgments can vary, depending on whether family, school authorities or peers are making them. Such variability may contribute to considerable diagnostic unreliability, because even clinicians' judgments may be relative to those of the group or groups to which they belong.

Two other points about cultural relativity are also relevant. First, carrying cultural relativity notions to the extreme can place nearly every reference group beyond reproach. Cultures can be reduced to subcultures and subcultures to mini-cultures. If we are not careful, this reduction process can result in our judging nearly every behavior as healthy. Second, the elevation of conformity to a position of preeminence can be alarming. One is reminded that so-called nonconformists have made some of the most beneficial social contributions. It can also become very easy to remove those whose different or unusual behavior bothers society. Some years ago in Russia, political dissidents were often placed in mental hospitals. In America, it sometimes happens that 70-year-old Uncle Arthur's family is successful in hospitalizing him largely to obtain his power of attorney. His deviation is that, at age 70, he is spending too much of the money that will eventually be inherited by the family. Finally, if all these points are not enough, excessive conformity has itself sometimes been the basis for judging persons abnormal.

B. SUBJECTIVE DISTRESS

We now shift the focus from the perceptions of the observer to the perceptions of the affected individual. Here the basic data are not observable deviations of behavior, but the subjective feelings and sense of well-being of the individual. Whether a person feels happy or sad, tranquil or troubled, and fulfilled or barren are the crucial considerations. If the person is anxiety-ridden, then he or she is maladjusted, regard-less of whether the anxiety seems to produce overt behaviors that are deviant in some way.

THE CASE OF CYNTHIA S

Cynthia has been married for 23 years. Her husband is a highly successful civil engineer. They have two children, one in high school and the other in college. There is nothing in Cynthia's history to suggest psychological problems. She is above average in intelligence, and she completed two years of college before marrying. Her friends all characterize her as devoted to her family. Of all her features, those that seem to describe her best include her strong sense of responsibility and a capacity to get things done. She has always been a "coper." She can continue to function effectively despite a great deal of personal stress and anxiety. She is a warm person, yet not one to wear her feelings or her troubles on her sleeve.

She recently enrolled in a night course at the local community college. In that course, the students were asked to write an "existential" account of their innermost selves. The psychologist who taught the course was surprised to find the following excerpts in Cynthia's account:

"In the morning, I often feel as if I cannot make it through the day. I frequently experience headaches and feel that I am getting sick. I am terribly frightened when I have to meet new people or serve as a hostess at a party. At times I feel a tremendous sense of sadness; whether this is because of my lack of personal identity, I don't know."

What surprised the instructor was that none of these expressed feelings were apparent from Cynthia's overt behavior she appeared confident, reasonably assertive, competent, in good spirits, and outgoing.

THE CASE OF ROBERT G

In the course of a routine screening report for a promotion, Robert was interviewed by the personnel analyst in the accounting company for which he worked. A number of Robert's peers in the office were also questioned about him. In the course of these interviews, several things were established.

Robert was a very self-confident person. He seemed very sure of his goals and what he needed to do to achieve them. Although hardly a happy-go-lucky person, he was certainly content with his progress so far. He never expressed the anxieties and uncertainty that seemed typical of so many of his peers. There was nothing to suggest any internal distress. Even his enemies conceded that Robert really "had it together".

These enemies began to be quite visible as the screening process moved along. Not many people in the office liked Robert. He tended to use people and was not above stepping on them now and then to keep his career moving. He was usually inconsiderate and frequently downright cruel. He was particularly insensitive to those below him. He loved ethnic humor and seemed to revel in his prejudices toward minority groups and those women who intruded into a "man's world." Even at home, his wife and son could have reported that they were kept in a constant turmoil because of his insensitive demands for their attention and services.

Cynthia and Robert are obviously two very different kinds of people. Cynthia's behavior is, in a sense, quite conforming. Her ability to cope would be cause for admiration by many. Yet she is unhappy and conflicted, and she experiences much anxiety. A clinical psychologist might not be surprised if she turned up in the consulting room. Her friends, however, would likely be shocked were they to learn that she had sought psychological help.

In contrast, many of Robert's friends, associates, and family members would be gratified if he were to seek help, since most of them have, at one time or another, described him as sick. But Robert is not at odds with himself. He sees nothing wrong with himself, and he would probably react negatively to any suggestion that he should seek therapy. Furthermore, his lack of motivation for therapy would probably make it an unprofitable venture.

ADVANTAGES OF THIS DEFINITION

Defining abnormal behavior in terms of subjective distress has some appeal. It seems reasonable to expect that individuals can assess whether they are experiencing emotional or behavioral problems and can share this information when asked to do so. Indeed, many methods of clinical assessment (for example, self-report inventories, clinical interviews) assume that the respondent is aware of his or her internal state and will respond to inquiries about personal distress in an honest manner. In some ways, this relieves the clinician of the burden of making an absolute judgment as to the respondent's degree of maladjustment.

PROBLEMS WITH THIS DEFINITION

The question is whether Cynthia, Robert, or both are maladjusted. The judgment will depend upon one's criteria or values. From a strict standpoint of subjective report, Cynthia qualifies but Robert does not. This example suggests that labeling someone maladjusted is not very meaningful unless the basis for the judgment is specified and the behavioral manifestations are stated.

Not everyone whom we consider to be "disordered" reports subjective distress. For example, clinicians sometimes encounter individuals who may have little contact with reality yet profess inner tranquility. Nonetheless, these individuals are institutionalized. Such examples remind us that subjective reports must yield at times to other criteria.

Another problem concerns the amount of subjective distress necessary to be considered abnormal. All of us become aware of our own anxieties from time to time, so the total absence of such feelings cannot be the sole criterion of adjustment. How much anxiety is allowed, and for how long, before we acquire a label? Many would assert that the very fact of being alive and in an environment that can never wholly satisfy us will inevitably bring anxieties. Thus, as in the case of other criteria, using phenomenological reports is subject to limitations. There is a certain charm to the idea that if we want to know whether a person is maladjusted, we should ask that person, but there are obvious pitfalls in doing so.

C. DISABILITY OR DYSFUNCTION

A third definition of abnormal behavior invokes the concept of disability or dysfunction. For behavior to be considered abnormal, it must create some degree of social (interpersonal) or occupational problems for the individual. Dysfunction in these two spheres is often quite apparent to both the individual and the clinician. For example, a lack of friendships or of relationships because of a lack of interpersonal contact would be considered indicative of social dysfunction, whereas the loss of one's job because of emotional problems (such as depression) would suggest occupational dysfunction.

THE CASE OF RICHARD Z

Richard was convinced by his wife to consult with a clinical psychologist. Previous contacts with psychiatrists had on one occasion resulted in a diagnosis of "hypochondriacal neurosis," and on another, a diagnosis of "passive aggressive personality." Richard has not worked in several years, even though he has a bachelor's degree in library science. He claims that he is unable to find employment because of his health. He reports a variety of physical symptoms, including dizziness, breathlessness, weakness, and "funny" sensations in the abdominal area. Making the rounds from physician to physician has enabled him to build an impressive stock of pills that he takes incessantly. None of his physicians, however, has been able to find anything physically wrong with him.

As a child, Richard was the apple of his mother's eye. She doted on him, praised him constantly, and generally reinforced the notion that he was someone special. His father disappeared about 18 months after Richard was born. His mother died six years ago, and he married shortly after that. Since then, his wife has supported both of them, thus enabling him to finish college. Only recently has she begun to accept the fact that something may be wrong with Richard.

THE CASE OF PHYLLIS H

Phyllis is a college student. She is in her sixth year of undergraduate study but has not yet obtained a degree. She has changed majors at least four times and has also had to withdraw from school on four occasions.

Her withdrawals from school have been associated with her drug habit. In two instances, her family placed her in a mental hospital; on two other occasions, she served short jail sentences following convictions on shoplifting charges. From time to time, Phyllis engages in minor crimes to support her drug habit. Usually she can secure the money from her parents, who seem to have an uncanny knack for accepting her outrageous justifications. She has been diagnosed with "antisocial personality disorder" and with "drug dependence (cocaine)."

According to the disability/dysfunction definition, both of these cases would suggest the presence of abnormal behavior. Richard is completely dependent on his wife (social dysfunction), and this, coupled with his litany of somatic complaints and his inability to cope with stress, has left him unemployed (occupational dysfunction). Phyllis's drug habit has interfered with her occupational (in this case, school) functioning.

ADVANTAGES OF THIS DEFINITION

Perhaps the greatest advantage to adopting this definition of abnormal behavior is that relatively little inference is required. Problems in both the social and occupational sphere often prompt individuals to seek out treatment. It is often the case that individuals come to realize the extent of their emotional problems when these problems affect their family or social relationships as well as significantly affect their performance at either work or school.

PROBLEMS WITH THIS DEFINITION

Who should establish the standards for social or occupational dysfunction, the patient, the therapist, friends, or the employer? In some ways, judgments regarding both social and occupational functioning are relative-not absolute-and involve a value-oriented standard. Although most of us may agree that having relationships and contributing to society as an employee or student are valuable characteristics, it is harder to agree on what specifically constitutes an adequate level of functioning in these spheres. In short, achieving individual's social relationships and contributions as a worker or student may be difficult. Recognizing this problem, psychopathologists have developed self-report inventories and special interviews to assess social and occupational functioning in a systematic and reliable way.

To summarize, several criteria are used to define abnormal behavior. Each criterion has its advantages and disadvantages, and no one criteria can be used as a gold standard. Some subjectivity is involved in applying any of these criteria. As Phares has stated,

The inevitable conclusion is that a definition of abnormality (maladjustment, pathology, etc.) is possible only with reference to a set of value judgments. To characterize someone as abnormal is to assert that he needs treatment. In short, someone has decided that the patient needs help in changing his behaviors—a relative, a court, or perhaps the patient himself. Once someone decides that the patient needs treatment, then our psychiatrist or psychologist can deliver an opinion on how can best to effect the desired

changes. But the decision for treatment as a function of abnormality must be based on someone's value system-it does not reside in psychiatry or psychology.

Where Does This Leave Us?

As the previous discussion points out, all definitions of abnormal behavior have their strengths and weaknesses. These definitions can readily incorporate certain examples of abnormal behavior, but exceptions that do not fit these definitions are easy to provide. For example, all of us can think of an "abnormal behavior" that would not be classified as such if we adopted the subjective distress criterion (for example, spending sprees in mania), and we can think of a behavior that might be classified incorrectly as abnormal if we adopted the violation of norms definition.

It is also important to note that abnormal behavior does not necessarily indicate mental illness. Rather, the term mental illness refers to a large class of frequently observed syndromes that are comprised of certain abnormal behaviors or features. These abnormal behaviors/features tend to co-vary or occur together such that they often are present in the same individual. For example, major depression is a widely recognized mental illness whose features (such as depressed mood, sleep disturbance, appetite disturbance, and suicidal ideation) tend to co-occur in the same individual. However, an individual who manifested only one or two of these features of major depression would not receive this diagnosis and might not be considered mentally ill. One can manifest a wide variety of abnormal behaviors (as judged by any definition), and yet not receive a mental disorder diagnosis.

MENTAL ILLNESS

Like abnormal behavior, the term mental illness or mental disorder is difficult to define. For any definition, exceptions come to mind. Nevertheless, it seems important to actually define mental illness rather than to assume that we all share the same implicit idea of what mental illness is.

The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994), known as DSM-IV the official diagnostic system for mental disorders in the United States, states that a mental disorder is conceptualized as:

“a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering, death, pain, disability, or an important loss of freedom”.

In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one. Whatever its original causes, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual. Neither deviant behavior (e.g., religious, political, or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of the dysfunction in the individual as described above.

CONCLUSION

Several aspects of this definition are important to note: (1) The syndrome (cluster of abnormal behaviors) must be associated with distress, disability, or increased risk of problems; (2) a mental disorder is considered to represent a dysfunction within an individual; and (3) not all deviant behaviors or conflicts with society are signs of mental disorder.

The astute reader has probably noticed that the DSM-IV definition of mental disorder incorporates the three definitions of abnormal behavior presented earlier. On the one hand, the DSM-IV definition is more comprehensive than any one of the three individual definitions of abnormal behavior presented

earlier. On the other hand, the DSM-IV definition is more restrictive because it focuses on syndromes, or clusters of abnormal behaviors, that are associated with distress, disability, or an increased risk for problems.

CAUSES OF MENTAL ILLNES:

OVERVIEW OF ETIOLOGY

The precise causes (etiology) of most mental disorders are not known. But the key word in this statement is precise. The precise causes of most mental disorders—or, indeed, of mental health—may not be known, but the broad forces that shape them are known: these are biological, psychological, and social/cultural factors. What is most important to go over is that the causes of health and disease are generally viewed as a product of the interplay or interaction between biological, psychological, and sociocultural factors. This is true for all health and illness, including mental health and mental illness.

For instance, diabetes and schizophrenia alike are viewed as the result of interactions between biological, psychological, and sociocultural influences. With these disorders, a biological predisposition is necessary but not sufficient to explain their occurrence (Barondes, 1993). For other disorders, a psychological or sociocultural cause may be necessary, but again not sufficient.

The brain and behavior are inextricably linked by the plasticity of the nervous system. The brain is the organ of mental function; psychological phenomena have their origin in that complex organ. Psychological and sociocultural phenomena are represented in the brain through memories and learning, which involve structural changes in the neurons and neuronal circuits. Yet neuroscience does not intend to reduce all phenomena to neurotransmission or to reinterpret them in a new language of synapses, receptors, and circuits. Psychological and sociocultural events and phenomena continue to have meaning for mental health and mental illness. It is still meaningful to speak of the interaction of biological and psychological and sociocultural factors in health and illness.

BIOPSYCHOSOCIAL MODEL OF DISEASE

The modern view that many factors interact to produce disease may be attributed to the seminal work of George L. Engel, who in 1977 put forward the Biopsychosocial Model of Disease (Engel, 1977).

Engel's model is a framework, rather than a set of detailed hypotheses, for understanding health and disease. To many scientists, the model lacks sufficient specificity to make predictions about the given cause or causes of any one disorder. Scientists want to find out what is the **specifically** contribution of different factors (e.g., genes, parenting, culture, stressful events) and how they operate. But the purpose of the biopsychosocial model is to take a broad view, to assert that simply looking at biological factors alone—which had been the prevailing view of disease at the time Engel was writing—is not sufficient to explain health and illness.

According to Engel's model, biopsychosocial factors are involved in the causes, manifestation, course, and outcome of health and disease, including mental disorders. The model certainly fits with common experience. Few people with a condition such as heart disease or diabetes, for instance, would dispute the role of stress in aggravating their condition. Research bears this out and reveals many other relationships between stress and disease (Cohen & Herbert, 1996; Baum & Posluszny, 1999).

One single factor in isolation—biological, psychological, or social—may weigh heavily or hardly at all, depending on the behavioral trait or mental disorder. That is, the relative importance or role of any one factor in causation often varies. For example, a personality trait like extroversion is linked strongly to genetic factors, according to identical twin studies (Plomin et al., 1994). Similarly, schizophrenia is linked strongly to genetic factors, also according to twin studies.

But this does not mean that genetic factors completely preordain or fix the nature of the disorder and that psychological and social factors are unimportant. These social factors modify expression and

outcome of disorders. Likewise, some mental disorders, such as post-traumatic stress disorder (PTSD), are clearly caused by exposure to an extremely stressful event, such as rape, combat, natural disaster etc. Yet not everyone develops PTSD after such exposure. On average, about 9 percent do (Breslau et al., 1998), but estimates are higher for particular types of trauma. For women who are victims of crime, one study found the prevalence of PTSD in a representative sample of women to be 26 percent (Resnick et al., 1993).

The likelihood of developing PTSD is related to pre-trauma vulnerability (in the form of genetic, biological, and personality factors), magnitude of the stressful event, preparedness for the event, and the quality of care after the event (Shalev, 1996). The relative roles of biological, psychological, or social factors also may vary across individuals and across stages of the life span. In some people, for example, depression arises primarily as a result of exposure to stressful life events, whereas in others the foremost cause of depression is genetic predisposition.

UNDERSTANDING CORRELATION, CAUSATION, AND CONSEQUENCES

Any discussion of the etiology of mental health and mental illness needs to distinguish three key terms: correlation, causation, and consequences. These terms are often confused. All too frequently a biological change in the brain (a lesion) is purported to be the “cause” of a mental disorder, based on finding an association between the lesion and a mental disorder. The fact is that any simple association—or correlation—cannot and does not, by itself, mean causation. The lesion could be a correlate, a cause of, or an effect of the mental disorder.

When researchers begin to tease apart etiology, they usually start by noticing correlations. A correlation is an association or linkage of two (or more) events. A correlation simply means that the events are linked in some way. Finding a correlation between stressful life events and depression would prompt more research on causation. Does stress cause depression? Does depression cause stress? Or are they both caused by an unidentified factor? These would be the questions guiding research. But, with correlational research, several steps are needed before causation can be established.

If a co-relational study shows that a stressful event is associated with an increased probability for depression and that the stress usually precedes depression’s onset, then stress is called a “**risk factor**” for depression. Risk factors are biological, psychological, or sociocultural variables that increase the probability for developing a disorder and antedate its onset. For each mental disorder, there are likely to be multiple risk factors, which are woven together in a complex chain of causation. Some risk factors may carry more weight than others, and the interaction of risk factors may be additive or synergistic.

Establishing causation of mental health and mental illness is extremely difficult. Studies in the form of randomized, controlled experiments provide the strongest evidence of causation. The problem is that experimental research in humans may be logistically, ethically, or financially impossible. Co-relational research in humans has thus provided much of what is known about the etiology of mental disorders.

Yet co-relational research is not as strong as experimental research in permitting inferences about causality. The establishment of a cause and effect relationship requires multiple studies and requires judgment about the weight of all the evidence. Multiple co-relational studies can be used to support causality, when, for example, evaluating the effectiveness of clinical treatments.

But, when studying etiology, co-relational studies are, if possible, best combined with evidence of biological plausibility. This means that co-relational findings should fit with biological, chemical, and physical findings about mechanisms of action relating to cause and effect. Biological plausibility is often established in animal models of disease. That is why researchers seek animal models in which to study causation. In mental health research, there are some animal models—such as for anxiety and

hyperactivity—but a major problem is the difficulty of finding animal models that simulate what is often uniquely human functioning. The search for animal models, however, is very important.

Consequences are defined as the later outcomes of a disorder. For example, the most serious consequence of depression in older people is increased mortality from either suicide or medical illness. The basis for this relationship is not fully known.

Putting this all together, the biopsychosocial model holds that biological, psychological, or social factors may be causes, correlates, and/or consequences in relation to mental health and mental illness. A stressful life event, such as receiving the news of a diagnosis of cancer, offers a graphic example of a psychological event that causes immediate biological changes and later has psychological, biological, and social consequences.

When a patient receives news of the cancer diagnosis, the brain's sensory cortex simultaneously registers the information (a correlate) and sets in motion biological changes that cause the heart to pound faster. The patient may experience an almost immediate fear of death that may later escalate to anxiety or depression. This certainly has been established for breast cancer patients (Farragher, 1998). Anxiety and depression are, in this case, consequences of the cancer diagnosis, although the exact mechanisms are not understood. Being anxious or depressed may prompt further changes in behavior, such as social withdrawal. So there may be social consequences to the diagnosis as well. This example is designed to lay out some of the complexity of the biopsychosocial model applied to mental health and mental illness.

BIOLOGICAL INFLUENCES ON MENTAL HEALTH AND MENTAL ILLNESS

There are far-reaching biological and physical influences on mental health and mental illness. The major categories are genes, infections, physical trauma, nutrition, hormones, and toxins (e.g., lead). We will focus on the first two categories—genes and infections—for these are among the most exciting and intensive areas of research relating to biological influences on mental health and mental illness

THE GENETICS OF BEHAVIOR AND MENTAL ILLNESS

That genes influence behavior, normal and abnormal, has long been established. Genes influence behavior across the animal spectrum, from the lowly fruit-fly all the way to humans. Sorting out which genes are involved and determining how they influence behavior present the greatest challenge.

Research suggests that many mental disorders arise in part from defects not in single genes, but in multiple genes. However, none of the genes has yet been pinpointed for common mental disorders (National Institute of Mental Health [NIMH], 1998). The human genome contains approximately 80,000 genes that occupy approximately 5 percent of the DNA sequences of the human genome. The human genome project have provided an initial rough draft version of the entire sequence of the human genome, and in the ensuing years, gaps in the sequence will be closed, errors will be corrected, and the precise boundaries of genes will be identified.

In parallel, clinical medicine is studying the aggregation of human disease in families. This effort includes the study of mental illness, most notably schizophrenia, bipolar disorder (manic depressive illness), early onset depression, autism, attention-deficit/hyperactivity disorder, anorexia nervosa, panic disorder, and a number of other mental disorders. From studying how these disorders run in families, and from initial molecular analyses of the genomes of these families, we have learned that heredity—that is, genes—plays a role in the transmission of vulnerability of all the aforementioned disorders from generation to generation.

But we have also learned that the transmission of risk is not simple. Certain human diseases such as Huntington's disease and cystic fibrosis result from the transmission of a mutation—that is, a deleteriously altered gene sequence—at one location in the human genome. In these diseases, a single mutation has everything to say about whether one will get the illness. The transmission of a trait due to a single gene in the human genome is called Mendelian transmission, after the Austrian monk, Gregor Mendel, who was the first to develop principles of modern genetics and who studied traits due to single genes.

When a single gene determines the presence or absence of a disease or other trait, genes are rather easy to discover on the basis of modern methods. Indeed, for almost all Mendelian disorders across medicine that affect more than a few people, the genes already have been identified. In contrast to Mendelian disorders, to our knowledge, all mental illnesses and all normal variants of behavior are genetically complex. What this means is that no single gene or even a combination of genes dictates whether someone will have an illness or a particular behavioral trait.

Rather, mental illness appears to result from the interaction of multiple genes that confer risk, and this risk is converted into illness by the interaction of genes with environmental factors. The implications for science are, first, that no gene is equivalent to fate for mental illness. This gives us hope that modifiable environmental risk factors can eventually be identified and become targets for prevention efforts.

In addition, we recognize that genes, while significant in their aggregate contribution to risk, may each contribute only a small increment, and, therefore, will be difficult to discover. However, using new technologies rising from the Human Genome Project, we will know the sequence of each human gene and the common variants for each gene throughout the human race. With this information, combined with modern technologies, we will in the coming years identify genes that confer risk of specific mental illnesses.

This information will be of the highest importance for several reasons. First, genes are the blueprints of cells. The products of genes, proteins, work together in pathways or in building cellular structures, so that finding variants within genes will suggest pathways that can be targets of opportunity for the development of new therapeutic interventions. Genes will also be important clues to what goes wrong in the brain when a disease occurs. For example, once we know that a certain gene is involved in risk of a particular mental illness such as schizophrenia or autism, we can ask at what time during the development of the brain that particular gene is active and in which cells and circuits the gene is expressed. This will give us clues to critical times for intervention in a disease process and information about what it is that goes wrong.

Finally, genes will provide tools for those scientists who are searching for environmental risk factors. Information from genetics will tell us at what age environmental cofactors in risk must be active, and genes will help us identify homogeneous populations for studies of treatment and of prevention. Heritability refers to how much genetics contributes to the variation of a disease or trait in a population at a given point in time (Plomin et al., 1997). Once a disorder is established as running in families, the next step is to determine its heritability, then its mode of transmission, and, lastly, its location through genetic mapping.

One powerful method for estimating heritability is through twin studies. Twin studies often compare the frequency with which identical versus fraternal twins display a disorder. Since identical twins are from the same fertilized egg, they share the exact genetic inheritance. Fraternal twins are from separate eggs and thereby share only 50 percent of their genetic inheritance. If a disorder is heritable, identical twins should have a higher rate of concordance—the expression of the trait by both members of a twin pair—than fraternal twins.

Such studies, however, do not furnish information about which or how many genes are involved. They just can be used to estimate heritability. For example, the heritability of bipolar disorder, according to

the most rigorous twin study, is about 59 percent, although other estimates vary (NIMH, 1998). The heritability of schizophrenia is estimated, on the basis of twin studies, at a somewhat higher level (NIMH, 1998). Even with a high level of heritability, however, it is essential to point out that environmental factors (e.g., psychosocial environment, nutrition, health care access) can play a significant role in the severity and course of a disorder.

Another point is that environmental factors may even protect against the disorder developing in the first place. Even with the relatively high heritability of schizophrenia, the median concordance rate among identical twins is 46 percent (NIMH, 1998), meaning that in over half of the cases, the second twin does not manifest schizophrenia even though he or she has the same genes as the affected twin. This implies that environmental factors exert a significant role in the onset of schizophrenia.

INFECTIOUS INFLUENCES

It has been known since the early part of the 20th century that infectious agents can penetrate into the brain where they can cause mental disorders. A highly common mental disorder of unknown etiology at the turn of the century, termed “general paresis,” turned out to be a late manifestation of syphilis.

The sexually transmitted infectious agent—*Treponema pallidum*—first caused symptoms in reproductive organs and then, sometimes years later, migrated to the brain where it led to neurosyphilis. Neurosyphilis was manifest by neurological deterioration (including psychosis), paralysis, and later death. With the wide availability of penicillin after World War II, neurosyphilis was virtually eliminated (Barondes, 1993).

Neurosyphilis may be thought of as a disease of the past (at least in the developed world), but dementia associated with infection by the human immunodeficiency virus (HIV) is certainly not. HIV-associated dementia continues to encumber HIV-infected individuals worldwide. HIV infection penetrates into the brain, producing a range of progressive cognitive and behavioral impairments.

Early symptoms include impaired memory and concentration, psychomotor slowing, and apathy. Later symptoms, usually appearing years after infection, include global impairments marked by mutism, incontinence, and paraplegia (Navia et al., 1986).

The prevalence of HIV-associated dementia varies, with estimates ranging from 15 percent to 44 percent of patients with HIV infection (Grant et al., 1987; McArthur et al., 1993). The high end of this estimate includes patients with subtle neuropsychological abnormalities. What is remarkable about HIV-associated dementia is that it appears to be caused not by direct infection of neurons, but by infection of immune cells known as macrophages that enter the brain from the blood. The macrophages indirectly cause dysfunction and death in nearby neurons by releasing soluble toxins (Epstein & Gendelman, 1993).

Besides HIV-associated dementia and neurosyphilis, other mental disorders are caused by infectious agents. They include herpes simplex encephalitis, measles encephalomyelitis, rabies encephalitis, and chronic meningitis (Kaplan & Sadock, 1998). More recently, research has uncovered an infectious etiology to one form of obsessive-compulsive disorder, as explained below.

PANDAS

In the late 1980s, it was discovered that some children with obsessive-compulsive disorder (OCD) experienced a sudden onset of symptoms soon after a **streptococcal pharyngitis** (Garvey et al., 1998).

The symptoms were classic for OCD—concerns about contamination, spitting compulsions, and extremely excessive hoarding—but the abrupt onset was unusual. Further study of these children led to the identification of a new classification of OCD called PANDAS. This acronym stands for **pediatric autoimmune neuropsychiatric disorders associated with streptococcal infection**. PANDAS are distinct from classic cases of OCD because of their episodic clinical course marked by sudden symptom exacerbation linked to streptococcal infection, among other unique features.

The exacerbation of symptoms is correlated with a rise in levels of antibodies that the child produces to fight the strep infection. Consequently, researchers proposed that PANDAS are caused by antibodies against the strep infection that also manage to attack the basal ganglia region of the child's brain (Garvey et al., 1998). In other words, the strep infection triggers the child's immune system to develop antibodies, which, in turn, may attack the child's brain, leading to obsessive and compulsive behaviors. Under this proposal, the strep infection does not directly induce the condition; rather, it may do so indirectly by triggering antibody formation. How the antibodies are so damaging to a discrete region of the child's brain and how this attack ignites OCD-like symptoms are two of the fundamental questions guiding research.

PSYCHOSOCIAL INFLUENCES ON MENTAL HEALTH AND MENTAL ILLNESS

Stressful life events, affect (mood and level of arousal), personality, and gender are prominent psychological influences. Social influences include parents, socioeconomic status, racial, cultural, and religious background, and interpersonal relationships.

Since these psychosocial influences are familiar to the general reader, detailed description of each is beyond the scope of our study here. Instead, we will summarize the sweeping theories of individual behavior and personality that inspired a vast body of psychosocial research: psychodynamic theories, behaviorism, and social learning theories.

PSYCHODYNAMIC THEORIES

Psychodynamic theories of personality assert that behavior is the product of underlying conflicts over which people often have scant awareness. Sigmund Freud (1856–1939) was the towering proponent of psychoanalytic theory, the first of the 20th-century psychodynamic theories.

Many of Freud's followers pioneered their own psychodynamic theories, but we will cover only psychoanalytic theory. A brief discussion of Freud's work contributes to a historical perspective of mental health theory and treatment approaches.

Freud's theory of psychoanalysis holds two major assumptions: (1) that much of mental life is unconscious (i.e., outside awareness), and (2) that past experiences, especially in early childhood, shape how a person feels and behaves throughout life (Brenner, 1978).

Freud's structural model of personality divides the personality into three parts—the id, the ego, and the superego. The id is the unconscious part that is the cauldron of raw drives, such as for sex or aggression. The ego, which has conscious and unconscious elements, is the rational and reasonable part of personality. Its role is to maintain contact with the outside world in order to help keep the individual in touch with society. As such, the ego mediates between the conflicting tendencies of the id and the superego.

The superego is a person's conscience that develops early in life and is learned from parents, teachers, and others. Like the ego, the superego has conscious and unconscious elements (Brenner, 1978).

When all three parts of the personality are in dynamic equilibrium, the individual is thought to be mentally healthy. However, according to psychoanalytic theory, if the ego is unable to mediate between the id and the superego, an imbalance would occur in the form of psychological distress and symptoms of mental disorders.

Psychoanalytic theory views symptoms as important only in terms of expression of underlying conflicts between the parts of personality. The theory holds that the conflicts must be understood by the individual with the aid of the psychoanalyst who would help the person unearth the secrets of the unconscious. This was the basis for psychoanalysis as a form of treatment.

BEHAVIORISM AND SOCIAL LEARNING THEORY

Behaviorism (also called learning theory) posits that personality is the sum of an individual's observable responses to the outside world (Feldman, 1997). As charted by J. B. Watson and B. F. Skinner in the early part of the 20th century, behaviorism stands in opposition with psychodynamic theories, which strive to understand underlying conflicts.

Behaviorism rejects the existence of underlying conflicts and an unconscious. Rather, it focuses on observable, overt behaviors that are learned from the environment (Kazdin, 1996, 1997). Its application to treatment of mental problems is known as behavior modification. Learning is seen as behavior change molded by experience. Learning is accomplished largely through either classical or operant conditioning.

Classical conditioning is grounded in the research of Ivan Pavlov, a Russian physiologist. It explains why some people react to formerly neutral stimuli in their environment, stimuli that previously would not have elicited a reaction. Pavlov's dogs, for example, learned to salivate merely at the sound of the bell, without any food in sight. Originally, the sound of the bell would not have elicited salivation. But by repeatedly pairing the sight of the food (which elicits salivation on its own) with the sound of the bell, Pavlov taught the dogs to salivate just to the sound of the bell by itself.

Operant conditioning, a process described and coined by B. F. Skinner, is a form of learning in which a voluntary response is strengthened or attenuated, depending on its association with positive or negative consequences (Feldman, 1997). The strengthening of responses occurs by positive reinforcement, such as food, pleasurable activities, and attention from others. The attenuation or discontinuation of responses occurs by negative reinforcement in the form of removal of a pleasurable stimulus. Thus, human behavior is shaped in a trial and error way through positive and negative reinforcement, without any reference to inner conflicts or perceptions. What goes on inside the individual is irrelevant, for humans are equated with "black boxes."

Mental disorders represented maladaptive behaviors that were learned. They could be unlearned through behavior modification (behavior therapy) (Kazdin, 1996, 1997).

SOCIAL LEARNING THEORY

The movement beyond behaviorism was spearheaded by Albert Bandura (1969, 1977), the originator of **social learning theory** (also known as social cognitive theory). Social learning theory has its roots in behaviorism, but it departs in a significant way. While acknowledging classical and operant conditioning, social learning theory places far greater emphasis on a different type of learning, particularly observational learning. Observational learning occurs through selectively observing the

behavior of another person, a model. When the behavior of the model is rewarded, children are more likely to imitate the behavior. For example, a child who observes another child receiving candy for a particular behavior is more likely to carry out similar behaviors.

Social learning theory asserts that people's cognitions—their views, perceptions, and expectations toward their environment—affect what they learn. Rather than being passively conditioned by the environment, as behaviorism proposed, humans take a more active role in deciding what to learn as a result of cognitive processing. Social learning theory gave rise to cognitive-behavioral therapy.

THE PROCESS OF DIAGNOSIS

THE IMPORTANCE OF DIAGNOSIS

Why should we use mental disorder diagnoses? Diagnosis is a type of expert-level categorization. Categorization is essential to our survival because it allows us to make important distinctions (for example, a mild cold versus viral pneumonia, a malignant versus a benign tumor). The diagnosis of mental disorders is an expert level of categorization used by mental health professionals that enables us to make important distinctions (for example, schizophrenia versus bipolar disorder with psychotic features).

ADVANTAGES OF DIAGNOSIS

There are at least four major advantages of diagnosis. First, and perhaps most important, a primary function of diagnosis is communication. A wealth of information can be conveyed in a single diagnostic term. For example, if a patient with a diagnosis of paranoid schizophrenia is referred to a psychologist, immediately, without knowing anything else about the patient, a symptom pattern will come to mind (delusions, auditory hallucinations, severe social/occupational dysfunction, and continuous signs of the illness for at least 6 months). Diagnosis can be thought of as "verbal shorthand" for representing features of a particular mental disorder. Using standardized diagnostic criteria (such as those that appear in the DSM-IV) ensures some degree of comparability with regard to mental disorder features among patients diagnosed in the same area or region.

Diagnostic systems for mental disorders are especially useful for communication because these classificatory systems are largely descriptive. That is, behaviors and symptoms that are characteristic of the various disorders are presented without any reference to theories regarding their causes. As a result, a diagnostician of nearly any theoretical persuasion can use them. If every psychologist used a different, theoretically based system of classification, a great number of communication problems would likely result.

Second, the use of diagnoses enables and promotes empirical research in psychopathology. Clinical psychologists define experimental groups in terms of individuals' diagnostic features, thus allowing comparisons between groups with regard to personality features, psychological test performance, or performance on an experimental task. Further, the way diagnostic constructs are defined and described will stimulate research on the disorders' individual criteria, on alternative criteria sets, and on the comorbidity (co-occurrence) between disorders.

Third, and in a related vein, research into the etiology, or causes, of abnormal behavior would be almost impossible to conduct without a standardized diagnostic system. In order to investigate the importance of potential etiological factors for a given psychopathological syndrome, we must first assign subjects to groups whose members share diagnostic features. For example, several years ago it was hypothesized that the experience of childhood sexual abuse may predispose individuals to develop features of borderline personality disorder (BPD). The first empirical attempts to evaluate the veracity of this hypothesis involved assessing the prevalence of childhood sexual abuse in well-defined groups of subjects with borderline personality disorder as well as in non-borderline psychiatric controls. These initial studies indicated that childhood sexual abuse does occur quite frequently in BPD individuals and that these rates are significantly higher than those found in patients with other (non-BPD) mental disorder diagnoses. Before we could reach these types of conclusions, there had to be a reliable and systematic method of assigning subjects to the BPD category.

Finally, diagnoses are important because, at least in theory, they may suggest which mode of treatment is most likely to be effective. Indeed, this is a general goal of a classification system for mental disorders (Blashfield & Draguns, 1976). As Blashfield and Draguns (1976, p.148) stated, "The final decision on the value of a psychiatric classification for prediction rests on an empirical evaluation of the utility of classification for treatment decisions." For example, a diagnosis of schizophrenia suggests to us that the administration of an antipsychotic medication is more likely to be effective than is a course of psychoanalytic psychotherapy. However, it is important to note one thing in passing. Although, in theory, the linkage between diagnosis and treatment would seem to justify the time involved in diagnostic assessment, often several treatments appear to be equally effective for an individual disorder.

In summary, diagnosis and classification of psychopathology serves many useful functions. Whether they are researchers or practitioners, contemporary clinical psychologists use some form of diagnostic scheme in their work.

At this point, we turn to a brief description of classification systems that have been used to diagnose mental disorders over the years, and then we examine in more detail the features of the diagnostic classification system that is used most frequently in the United States, the DSM-IV.

EARLY CLASSIFICATION SYSTEMS

Classification systems for mental disorders have proliferated for many years. For example, the earliest reference to a depressive syndrome appeared as far back as 2600 B.C. Since that time, both the number of and breadth of classification systems have increased.

To bring some measure of order out of this chaos, the Congress of Mental Science adopted a single classification system in 1889 in Paris. More recent attempts can be traced to the World Health Organization and its 1948 International Statistical Classification of Diseases, Injuries, and Causes of Death, which included a classification of abnormal behavior.

In 1952, the American Psychiatric Association published its own classification system in the Diagnostic and Statistical Manual, and this manual contained a glossary describing each of the diagnostic categories that were included. This first edition, known as DSM-I, was followed by revisions in 1968 (DSM-II), 1980 (DSM-III), and 1987 (DSM-III-R).

Presently, the most widely used classification system is the previously mentioned American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV), which appeared in 1994. All of these manuals are embodiments of Emil Kraepelin's efforts in the late nineteenth century.

The most revolutionary changes in the diagnostic system were introduced in DSM-III, published in 1980. These changes included the use of explicit diagnostic criteria for mental disorders, a multiaxial system of diagnosis, a descriptive approach to diagnosis that attempted to be neutral with regard to theories of etiology, and a greater emphasis on the clinical utility of the diagnostic system. Because these innovations have been retained in subsequent editions of the DSM (DSM-III-R and DSM-IV), these are described in the following section.

DSM-IV

The fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) was published in 1994. Revisions to the previous diagnostic manual (DSM-III-R) were guided by a three-stage empirical process.

First, 150 comprehensive reviews of the literature on important diagnostic issues were conducted. These literature reviews were both systematic and thorough. Results from these reviews led to recommendations for revisions and served to document the rationale and empirical support for the changes made in DSM-IV.

Second, 40 major re-analyses of existing data sets were completed in cases where the literature reviews could not adequately resolve the targeted diagnostic issue.

Third, 12 DSM-IV field trials were conducted in order to assess the clinical utility and predictive power of alternative criteria sets for selected disorders (for example, antisocial personality disorder). In summary, the changes made in DSM-IV were based on empirical data to a much greater extent than was true in previous editions of the DSM.

A complete DSM-IV diagnostic evaluation is a multi-axial assessment. Clients or patients are evaluated along five axes, or domains of information. Each of these axes/domains should aid in treatment planning and prediction of outcome.

Axis I is used to indicate the presence of any of the clinical disorders or other relevant conditions, with the exception of the personality disorders and mental retardation. These two classes of diagnoses are coded on Axis II.

Axis III is used to highlight any current medical condition that may be relevant to the conceptualization or treatment of an individual's Axis I or Axis II clinical disorder. Psychosocial and environmental problems relevant to diagnosis, treatment, and prognosis are indicated on Axis IV.

Finally, a quantitative estimate (1 to 100) of an individual's overall level of functioning is provided on Axis V. Each of the five axes contributes important information about the patient, and together they provide a fairly comprehensive description of the patient's major problems, stressors, and level of functioning.

THE CASE OF MICHELLE M

Michelle M. was a 23-year-old woman who was admitted to an inpatient unit at a hospital following her sixth suicide attempt in two years. She told her ex-boyfriend (who had broken up with her a week earlier) that she had swallowed a bottle of aspirin, and he rushed her to the local emergency room. Michelle had a five-year history of multiple depressive symptoms that never abated; however, these had not been severe enough to necessitate hospitalization or treatment. They included dysphoric mood, poor appetite, low self-esteem, poor concentration, and feelings of hopelessness.

In addition, Michelle had a history of a number of rather severe problems that had been present since her teenage years. First, she had great difficulty controlling her emotions. She was prone to become intensely dysphoric, irritable, or anxious almost at a moment's notice. These intense negative affect states were often unpredictable and, although frequent, rarely lasted more than four or five hours. Michelle also reported a long history of impulsive behaviors, including polysubstance abuse and binge eating. Her anger was unpredictable and quite intense. For example, she once used a hammer to literally smash a wall to pieces following a bad grade on a test.

Michelle's relationships with her friends, boyfriends, and parents were intense and unstable. People who spent time with her frequently complained that she would often be angry with them and devalue them for no apparent reason. She also constantly reported an intense fear that others (including her parents) might abandon her. For example, she once clutched a friend's leg and was dragged out the door to her friend's car while Michelle tried to convince the friend to stay for dinner. In addition, she had attempted to leave home and attend college in nearby cities on four occasions. Each time, she returned home

within a few weeks. Prior to her hospital admission, her words to her ex-boyfriend over the telephone were, "I want to end it all. No one loves me."

The DSM-IV diagnostic evaluation for Michelle M. is shown here:

Diagnostic Evaluation: Michelle M.

Axis I: 300.4

Dysthymic Disorder early onset

305.00 Alcohol Abuse

305.20 Cannabis Abuse

305.60 Cocaine Abuse

305.30 Hallucinogen Abuse

Axis II: 301.83 Borderline Personality Disorder
(PRINCIPAL DIAGNOSIS)

Axis III: none

Axis IV: Problems with primary support group Educational problems

Axis V: GAF = 20 (Current)

Several features of this diagnostic formulation are noteworthy First, Michelle has received multiple diagnoses on Axis I. This is allowed, and even encouraged, in the DSM-IV system because the goal is to describe the client's problems comprehensively.

Second, note that her borderline personality disorder (BPD) diagnosis on Axis II is considered to be the principal diagnosis. This means that this condition is chiefly responsible for her admission to the hospital and may be the focus of treatment.

Finally, her Global Assessment of Functioning (GAF) score on Axis V indicates serious impairment - in this case, a danger of hurting herself.

GENERAL ISSUES IN CLASSIFICATION

We have briefly described the DSM-IV to give the reader a general idea of what psychiatric classification entails. However, it is important to examine a number of broad issues related to classification in general, and to the DSM-IV specifically. The eight major issues in classification are discussed below.

CATEGORIES VERSUS DIMENSIONS

Essentially, the mental disorder categories represent a typology. Based upon certain presenting symptoms or upon a particular history of symptoms, the patient is placed in a category. This approach has several potential limitations. First, in too many instances, it is easy to confuse such categorization with explanation. If one is not careful, there is a tendency to think "This patient is experiencing obsessions because she has obsessive-compulsive disorder" or "This person is acting psychotic because he has schizophrenia." When this kind of thinking occurs, explanation has been supplanted by a circular form of description.

In addition, abnormal behavior is not qualitatively different from so-called normal behavior. Rather, these are endpoints of a continuous dimension. The difference between so-called normal behavior and psychotic behavior; for example, is one of degree rather than kind. Yet mental disorder diagnoses in terms of categories imply that individuals either have the disorder in question or they do not. This all-or-nothing type of thinking may be at odds with what we know about how symptoms of psychopathology are distributed in the population.

For example, a categorical model of borderline personality disorder (BPD), as presented in the DSM-IV (that is, present versus absent), may not be appropriate because individuals differ only with respect to how many BPD symptoms they exhibit (a quantitative difference). In other words, the categorical model may misrepresent the true nature of the borderline construct. In fact, there may be relatively few diagnostic constructs that are truly categorical in nature.

BASES OF CATEGORIZATION

In order to classify psychiatric patients, one must use a wide assortment of methods and principles. In some cases, patients are classified almost solely on the basis of their current behavior or presenting symptoms. In other cases, the judgment is made almost entirely on the basis of history. In the case of major depression, for example, one individual may be diagnosed on the basis of a diagnostic interview conducted by a clinician; another may be classified because of a laboratory result, such as a "positive" dexamethasone suppression test (DST); still another may be diagnosed as a result of scores on a self-report measure of depression. Laboratory results provide the basis for some diagnoses of cognitive disorders (for example, vascular dementia), whereas other cognitive disorder diagnoses (such as delirium) are determined solely by behavioral observation. Thus, the diagnostic enterprise may be quite complicated for the clinician, requiring both knowledge of and access to a wide variety of diagnostic techniques. A major implication is that membership in any one diagnostic category is likely to be heterogeneous because there are multiple bases for a diagnosis.

PRAGMATICS OF CLASSIFICATION

Psychiatric classification has always been accompanied by a certain degree of appeal to medical authority. But there is a concurrent democratic aspect to the system that is quite puzzling. For example, psychiatry for many years regarded homosexuality as a disease to be cured through psychiatric intervention. As a result of society's changing attitudes and other valid psychological reasons, homosexuality was dropped from the DSM system and is now regarded as an alternate lifestyle. Only when homosexual individuals are disturbed by their sexual orientation or wish to change it do we encounter homosexuality in the DSM-IV (as an example under the category "sexual disorder not otherwise specified"). The issue here is not whether this decision was valid or not. The issue is how the decision to drop homosexuality from the DSM system was made. The demise of homosexuality as a disease entity occurred through a vote of the psychiatric membership.

This example also serves as a reminder that classification systems such as the DSM are crafted by committees. The members of such committees represent varying scientific, theoretical, professional, and even economic constituencies. Consequently, the final classification product adopted may represent a political document that reflects compromises that will make it acceptable to a heterogeneous professional clientele.

DESCRIPTION

Without doubt, the DSM-IV provides thorough descriptions of the diagnostic categories. The DSM also provides additional information for each diagnosis, including the age of onset, course, prevalence, complications, family patterns, cultural considerations, associated descriptive features and mental disorders, and associated laboratory findings. All this descriptive detail should enhance the system's reliability and validity.

RELIABILITY

A scheme that cannot establish its reliability has serious problems. In this context, reliability refers to the consistency of diagnostic judgments across raters. One of the major changes seen in DSM-III (the inclusion of specific and objective criteria for each disorder) reflected an attempt to increase the reliability of the diagnostic system. If Psychologist A and Psychologist B both observe the same patient but cannot agree on the diagnosis, then both their diagnoses are useless because we do not know which to accept. This is the very situation that plagued the American diagnostic systems for many years.

For example, an early study illustrating the unreliability of previous diagnostic systems was carried out by Beck, Ward, Mendelson, Mock, and Erbaugh (1962). Two different psychiatrists each interviewed the same 153 newly admitted psychiatric patients. Overall agreement among these psychiatrists was only 54%. Some of the disagreements in diagnosis seemed to stem from inconsistencies in the information patients presented to the psychiatrists. For example, Patient A may have been relatively open with Psychiatrist F, but less so with Psychiatrist G. But much of the unreliability problem seemed to lie with the diagnosticians and/or the diagnostic system itself.

Certain pragmatic factors can also reduce reliability across diagnosticians. Sometimes it happens that a given institution will not admit patients who carry a certain diagnosis. Yet a mental health professional may feel strongly that the patient could benefit from admission (or perhaps has nowhere else to go). What should be done? The "humanitarian" choice often seems to be to alter a diagnosis, or at least to "fudge" a bit. The patient with alcohol dependence suddenly is diagnosed with something else. Similarly, an insurance company may reimburse a clinic for the treatment of patients with one diagnosis but not another. Or perhaps one diagnosis permits six therapy visits but another allows as many as 15 sessions. Therefore, a diagnosis may be intentionally or unintentionally manipulated.

These examples may lead us to believe that diagnostic unreliability is the rule and not the exception. However, Meehl (1977), for example, feels that psychiatric diagnosis is not nearly as unreliable as it is made out to be. Specifically, Meehl argues that if we confine ourselves to major diagnostic categories, require adequate clinical exposure to the patient, and study welltrained clinicians who take diagnosis seriously, then inter-clinician agreement will reach acceptable levels.

The field of psychopathology has begun to address these concerns about reliability by developing structured diagnostic interviews that essentially "force" diagnosticians to assess individuals for the specific DSM criteria that appear in the diagnostic manual. For example, there are now several structured interviews that assess features of Axis I disorders and a number of structured interviews for Axis II disorders exist as well. Interestingly, the overall level of diagnostic reliability reported in empirical studies has increased greatly following the introduction of these structured interviews. It is clear that adhering to the structure and format of these interviews has led to a significant increase in diagnostic reliability.

However, even with the use of structured interviews, reliability is not equally good across all categories. The presence versus absence of some disorders (for example, generalized anxiety disorder) may be particularly difficult to judge.

Further, there is some question as to whether or not busy clinicians will devote the time and effort necessary to systematically evaluate the relevant diagnostic criteria. Reliability coefficients never seem to be as high in routine, everyday work settings as they are in structured research studies.

VALIDITY

Reliability will directly affect the validity of a diagnostic system. As long as diagnosticians fail to agree upon the proper classification of patients, we cannot demonstrate that the classification system has meaningful correlates - that is, has validity. Important correlates include prognosis, treatment outcome,

ward management, etiology, and so on. And without predictive validity, classification becomes an intellectual exercise devoid of any really important utility. However, if we can demonstrate that categorization accurately indicates etiology, course of illness, or preferred kinds of treatment, then a valid basis for its use has been established.

The predominant method for establishing the validity of a diagnostic construct was outlined in a classic article by Robins and Guze (1970). They proposed that establishing the diagnostic validity of a syndrome is a five-stage process: (1) clinical description, including a description of characteristic features beyond the disorder's symptoms (such as demographic features); (2) laboratory studies (including psychological tests) to identify meaningful correlates of the diagnosis; (3) delimitation from other disorders to ensure some degree of homogeneity among diagnostic members; (4) follow-up studies to assess the test-retest reliability of a diagnosis; and (5) family studies to demonstrate that the proposed disorder tends to run in families, suggesting a hereditary component to the disorder. This particular five-stage method for establishing diagnostic validity remains quite influential even today. In fact, most contemporary research in psychopathology represents one or more of the validation stages outlined by Robins and Guze.

BIAS

Ideally, a classification system will not be biased with respect to how diagnoses are assigned to individuals who have different backgrounds (for example, different gender, race, or SES). The validity and utility of a classification system would be called into question if the same cluster of behaviors resulted in a diagnosis for one individual but not for another individual. The two areas of potential bias that have received the most attention are sex bias and racial bias.

Some critics have attacked the DSM system as a male-centered device that overestimates pathology in women, others deny this charge. Widiger and Spitzer (1991) have presented a useful conceptual analysis of what constitutes sex bias in a diagnostic system. They argue that previous attempts to demonstrate diagnostic sex bias have been both conceptually and methodologically flawed. Further, some of the findings of earlier studies have been grossly misinterpreted and misunderstood.

Widiger and Spitzer note that differential sex prevalence for a disorder does not in and of itself demonstrate diagnostic sex bias because, for example, it is conceivable that biological factors or cultural factors may make it more likely that men (or women) will exhibit the criteria for a certain diagnosis. For example, antisocial personality disorder is diagnosed much more frequently in men than in women, but this may be the result of biological differences (such as testosterone) or other factors that influence the two genders differentially (such as societal expectations for aggressiveness in men).

However, Widiger and Spitzer did present evidence suggesting that clinicians may be biased in the way they apply diagnoses to men versus women, even in cases where the symptoms presented by men and women were exactly the same! Although this suggests that there may be some bias in the way clinicians interpret the diagnostic criteria (that is, clinicians may exhibit sex bias), it does not indicate sex bias within the diagnostic criteria. These results suggest the need for better training of diagnosticians rather than an overhaul of the diagnostic criteria.

COVERAGE

With close to 400 possible diagnoses, DSM-IV cannot be faulted for being too limited in its coverage of possible diagnostic conditions. It is likely that most conditions that bring individuals in for psychiatric or psychological treatment could be classified within the DSM-IV system. However, some may feel that DSM-IV errs in the opposite direction - that its scope is too broad. For example, a host of childhood developmental disorders are included as mental disorders. The child who is dyslexic, has speech problems such as stuttering, or has great difficulties with arithmetic is given a DSM-IV diagnosis. Many question the appropriateness or benefit of labeling these conditions as mental disorders.

ADDITIONAL CONCERNS

Although the previously described difficulties are real and fairly obvious, a number of indirect or subtle problems arise through the acceptance and use of diagnostic classification systems. For example, classifications tend to create the impression that mental disorders exist per se. Such terms as disorder, symptom, condition, and suffering from suggest that the patient is the victim of a disease process. The language of the system can eventually lead even astute observers toward a view that interprets learned reactions or person-environment encounters as disease processes.

In addition, if we are not careful, we may come to feel that classifying people is more satisfying than trying to relieve their problems. As we shall see later, therapy can be an uncertain, time-consuming process that is often fraught with failure. But pigeonholing can be immediately rewarding: it provides a sense of closure to the classifier. Like solving crossword puzzles, it may relieve tension without having any long-term positive social significance.

The system likewise caters to the public's desire to regard problems in living as medical problems that can be dealt with simply and easily by a pill, an injection, or a scalpel. Unfortunately, however, learning to solve psychological problems is hard work. The easier approach is to adopt a passive, dependent posture in which the patient is relieved of psychological pain by an omniscient doctor. Although such a view may be serviceable in dealing with strictly medical problems, it has dubious value at best in confronting the psychosocial problems of living.

A final indirect problem is that diagnosis can be harmful or even stigmatizing to the person who is labeled. In our society, diagnosis may close doors rather than open them for patients and ex-patients. Too often, diagnosis seems to obscure the real person; observers see labels, not the real people behind them. Thus, labels can damage relationships, prevent people from being hired or promoted, and, in extreme cases, even result in a loss of civil rights. Labels can even encourage some people to capitulate and assume the role of a "sick" person.

THE CONCEPT OF PSYCHOLOGICAL ASSESSMENT IN CLINICAL PSYCHOLOGY

DEFINITION OF PSYCHOLOGICAL ASSESSMENT

Psychological assessment can be defined as “the process of systematically gathering information about a person in relation to his or her environment so that decisions can be made, based on this information that is in the best interests of the individual”.

For a clinical psychologist a number of questions are important to consider like what are patient’s current problems and the possible resources he has for dealing with these problems? What information about his past might be contributing to the problem? Are there any people in patients’ life who might be able to solve these problems? And what is his behavior likely to be in future? Clinical psychologist is uniquely equipped, however, to examine these issues systematically through procedures that have been carefully developed and evaluated by their field.

STEPS IN THE ASSESSMENT PROCESS

First a psychologist formulates an initial question or set of questions. These questions are typically developed in response to a referral or request for help made by either an individual or by others on behalf of an individual. (e.g., concerned family members, parent, and physician).

Second, a psychologist generates a set of goals for collection information----what the psychologist hopes to accomplish during the assessment process.

The third step in the assessment process involves the identification of standards for interpreting the information that is collected.

Fourth, a psychologist must collect the relevant data. This step includes collecting information about the person and the environment and carefully describing and recording what is observed.

The fifth step in the assessment process involves making decisions and judgment on the basis of the data that have been collected. Finally, a psychologist must communicate these judgments and decisions to others typically in the form of a psychological report.

Psychological theory and research are the two primary factors that shape the clinical assessment process and make it more systematic than the way people form impressions of others in everyday life. Theories guide psychologists in forming certain types of questions and hypothesis and in looking for certain types of information

THE PROCESS OF PSYCHOLOGICAL ASSESSMENT

STEP 1: DECIDING WHAT IS BEING ASSESSED

The assessment process begins with a series of questions. Is there a significant psychological problem? What is the nature of this person’s problem? Is the problem primarily one of the emotion, thought, or behavior? What are possible causes of the problem? What is the course of the problem likely to be if it goes untreated? What type of treatment is likely to be the most helpful? These questions come in part from the client and are called the “**referral questions**”-----questions that led the client to refer to the psychologist.

THE REFERRAL

The assessment process begins with a referral. Someone—a patient, a teacher, a psychiatrist, a judge, or perhaps a psychologist—poses a question about the patient. “*Why is Johnny disobedient?*” or “*Why can’t Alice learn to read like other children?*” clinicians thus begin with the *referral question*. It is important that they take pains to understand precisely what the question is or what the referral source is seeking. In some instances, the question may be impossible to answer; in others, the clinician may decide that a direct answer is inappropriate or the question needs rephrasing.

Often Client’s presenting concerns are tied to a recent event. The recent event, however, may represent the final step in a more long-standing problem. The questions and concerns that a client poses at the time of referral do not necessarily tell the whole story. A client is unlikely to be aware of all the information that may be relevant to a psychologist in formulating and understanding of the problem. Furthermore, the client may purposefully or unknowingly withhold information from the psychologist for a variety of reasons. It is important to recognize that clinical psychologist cannot simply use intuition and subjective judgment to identify the complex factors that lead to a referral or to a request for help. Rather, a clinical psychologist will need to turn the theory and research in formulating a more complete set of initial questions to guide a formal assessment.

What does a psychologist want to know about a person who is seeking help? Most current theories of human behavior recognize multiple levels of functioning that are relevant to understanding any behavior. For example, all emotions are associated with underlying biological processes, they exist within the conscious

(but private) awareness of the individual, and they are linked to some type of observable antecedent and/or consequent event, either externally in the environment or internally within the experience of the individual. Further many theories consider these processes to be interdependent and reciprocally related.

The implication of these complex relationships for psychological assessment is clear---a psychologist may assess the client and his or her problem at a number of different levels. The primary aspects of the person that are possible targets for assessment are biological processes, cognitions, emotions and behavior.

Biological and Psycho-physiological processes include heart rate reactivity, blood pressure galvanic skin response, muscle tension, sexual arousal, startle response, and eye tracking movement.

Cognitive processes include intellectual functioning, perceptions of the self, perceptions of others, beliefs about the causes of events, and perception of contingency and control.

Emotional processes that are the focus of assessment include mood states, trait levels of emotions, and emotional reactivity, finally, measure of **overt behavior** include performance on standardized tasks, observations of behavior in simulated situations, and behavior observed in the client’s natural environment.

In addition to these various aspects environment is also multifaceted, confronting psychologists with a choice among several levels of focus. These levels of focus include distinctions, intermediate, and distal environment as well as objective versus subjective or perceived features of the environment.

The **Proximal** and, or **Immediate** features of the environment include the client's family environment and the characteristics of the school or work setting.

Intermediate levels of the environment include the geographic region in which the individual resides.

Finally, the **Distal**, or **Broader**, environment includes the general geographic and socio-cultural environment in which the client lives.

Despite the potential importance of the different aspects of the individual and the environment, psychologists cannot assess all these factors for any single case. Both the time and the cost involved in conducting such as extensive assessment would be prohibitive. A psychologist's theoretical orientation plays a critical role in guiding the psychologist to obtain certain types of information and to disregard other aspects of the person or the environment.

STEP 2: DETERMINING THE GOALS OF ASSESMENT

The second step in the process of clinical assessment is the formulation of the psychologist's goal in a particular case. Once again, psychologists are confronted with a number of choices as they carry out the assessment process. Goals may include diagnostic classification, determination of the severity of a problem, risk screening for future problems and evaluation of the effects of treatment, and prediction about the likelihood of certain types of future behavior.

DIAGNOSIS

Diagnosis is perhaps a most familiar term than assessment in the work of clinical psychologists. Although generating a diagnosis is one of the tasks in which a psychologist may engage, it is actually a subset of the broader process of assessment. Within the process of psychological assessment, the task of diagnosing implies that certain procedures or tests are administered to an individual in order to classify the person problem and, if possible, to identify causes and prescribe treatment, psychologists typically make diagnosis based on the *DSM-IV* criteria.

Diagnostic decisions are often the first goal of the assessment process. Optimally, diagnosis should provide information about the specific features, or symptoms that the person shares with other individuals who have been identified as having the same pattern of symptoms. If the criteria for making particular diagnosis are clear and have been carefully evaluated in this case, the psychologist will be able to draw on research and information about these other individuals.

There is a close link between assessment procedures and the diagnostic system that a psychologists uses for u understanding and classifying psychotherapy. Specifically, assessment involves the identification of the features or characteristics that distinguish individual cases from one another, whereas a diagnostic system involves the grouping together of individual cases according to their identifying features. Any diagnostic system .such as *DSM IV* should specify a method of assessment to measure and quantify the important symptoms of the various categories or disorders within the diagnostic system. A diagnostic system represents one of the outcomes of assessment ---the classification of individuals using the information that has been generated.

SEVERITY

It is not always sufficient to know that an individual meets the criteria for a particular problem or disorder, because there can be substantial differences among individuals with a similar problem, a concept referred t o as *heterogeneity*. Or it may also be compared with the term severity or variability in the disease. For example breast cancer may vary from a small-localized tumor (stage 1) to carcinoma that has spread throughout other parts and systems of the body (stage IV).

Discrimination of the severity of problems or disorders requires assessment and methods that are sensitive to variation in the frequency, intensity, and duration of specific symptoms. If a patient meets the criteria for major depression, the psychologist must gather additional information about the problem. An important factor in determining the severity of a disorder is the degree of impairment that is present in the person's daily life. For example a patient with an eating disorder may have suffered from Bulimia Nervosa for several years, yet is still able to be successful in her college courses, work at a part-time job, and maintain her friendship. Another patient with bulimia, however, may find that her preoccupation with eating and her concerns about being overweight have become the predominant feature in her life. Thus psychologist must consider the individual's overall life functioning and competence in order to have a complete understanding of the scopes of the problem.

SCREENING

Not all psychological assessment takes place with individuals who have been referred for clinical services. Often clinical psychologists are called on to screen large groups of individuals, either to identify the presence of problems or to predict who is at greatest risk to develop a problem at some point in the future. For example, several interesting examples of screening related to depression have been developed. Depression is highly prevalent in the general population, but only a small portion of depressed individuals seek treatment for the disorder. Efforts to screen for depression have been undertaken on a large scale.

In depression screening individuals are encouraged to complete a brief depression questionnaire that assesses their current level of depressive symptoms. Those who score above a certain cutoff level that we associated with increased risk for depression are then contacted for a diagnostic interview to determine if they are suffering from Major Depression.

Children whose parents suffer from Major Depression Disorders are much more likely to develop serious psychological and behavioral problems than are children whose parents do not exhibit an identifiable form of psychopathology. Psychologists may be called on to screen or identify early evidence of problems among children in these families in order to facilitate early interventions that may prevent the development of such problems.

Depression in adolescence is also a prevalent problem that typically goes unrecognized, specifically depression in adolescent has been found to be associated with somatic problems like recurrent headaches. Depression screening tools can also utilized in medical emergency rooms. Brief depression questioners are administered to emergency room patients to identify those who may need treatment for depression.

PREDICTIONS

In addition to generating detailed description of an individual's current functioning, psychologists are often called on to make predictions about how a person may behave at some point in the future. These predictions may span very short periods of time to long-term predictions about subsequent risk for disorders.

One of the greatest challenges for psychologists is the prediction of violent behavior especially in relation to the prediction of youth violence. The accurate prediction of violent behavior could then lead to attempts to prevent violent acts before they occur. Despite the extraordinary significance of predicting violent behavior, psychologists have been largely unsuccessful in this effort. This lack of success is due, in part, to the fact that we do not sufficiently understand the complex factors that leads to acts of violence.

Psychologists are actually effective in making predictions about certain problems, particularly if those problems have reasonably high rate of occurrence in the population. For example patterns of aggressive

and disruptive behavior disorders in adolescence can be predicted with some degree of accuracy from information collected in early childhood. In the prediction of violence and other low base rate behaviors, psychologists must carefully weigh the consequences of false positive and false negative predictions. If the consequences of wrongly predicting an outcome (a false positive) are small and the costs of missing an outcome that does occur (false negative) are great, then it will be acceptable to over-predict. However, if there are negative consequences to wrongly predicting an outcome, then even one instance of over prediction will be problematic.

EVALUATION OF INTERVENTION

Assessment is often thought of as an initial step in formulating a sense of a client's problem or a diagnosis and in developing a plan for treatment. However, effective assessment does not end once treatment begins. Rather, assessment methods should be re-administered at regular intervals to monitor and evaluate the effects of treatment.

For example, by obtaining pretreatment or baseline information on the nature and severity of a client's problems, follow-up assessment with the same instrument can be conducted to allow for evaluation of changes that have resulted from treatment (this is called the ABA method).

Evaluating change requires a few essential steps. Obviously, the same instruments must be used at both the pretreatment and follow-up assessments that exact comparisons can be made on these scales.

Further it is essential that the measures can be counted on to produce consistent or reliable information, that is, the measures must be minimally affected by error so that meaningful changes can be distinguished from random fluctuations.

Finally, criteria (cut off points) must be developed to distinguish clinically meaningful change from reliable but relatively trivial shifts in the target problems.

STEP 3: SELECTING STANDARDS FOR MAKING DECISIONS

Knowing what to measure is only part of the process of assessment. A psychologist must also know what to do with the information once it is collected. Making decisions about the information is essential, and decisions and judgments require points of reference for comparison.

Standards are used to determine if a problem exists, how severe a problem is, and whether the individual has evidenced improvement over a specified period of time.

Comparisons can be made to standards that involve other people (normative standards) or to the self at other points in time (self-referent standards)

Psychological assessment reflects the meeting point of two important functions of psychology—interest in the nature of people in general (the normative, or nomothetic tradition) and concerns about a specific person (the individual, idiographic tradition).

When working with an individual, a psychologist is drawing on the idiographic traditions. This process involves the discovery of what is unique about this person given his or her history, current personality structure, and present environment conditions.

In arriving at an impression of this individual, however, the psychologist is frequently required to make judgments about this person in comparison to most other people. In doing so, the psychologist draws on the nomothetic tradition of laws and rules that apply to the behavior of people in general.

The application of normative information to individual decisions is a complex process. No single individual is ever represented perfectly by data collected on large samples of people. Therefore predictions made on the basis on data collected on large samples will not necessarily hold true for any particular individual, which means that psychologists are often involved in making educated guesses about an individual based on the knowledge base accumulated about people in general.

In making normative comparisons, the psychologist must determine the degree to which a particular individual is similar to the normative sample on demographic characteristics such as age, sex, ethnicity, education, and economic status. For example, it would be inaccurate (and inappropriate) to make predictions about an inner city African American adolescent's performance on a test if the normative sample that is used in deriving scores was composed only of middle and upper socioeconomic status Caucasian youth.

VARIABILITY OF A NORMATIVE SAMPLE

It can be represented in several ways, but the most common is based on the mean as a measure of central tendency and the standard deviation as a measure of variability. The mean score for a population on a measure is determined by summing all the scores from a sample that is representative of the population and dividing by the number of individuals in the sample. For use in psychological assessment, the mean and standard deviation are often converted to standard scores that allow for easy comparison across very different measures.

SELF-REFERENT STANDARDS

Some of the judgments that are made as part of the clinical assessment process do not involve comparisons to others. Rather, it is important to consider how much or how little this person has changed over time or across different situations. In such instances, the appropriate criterion is the person himself or herself.

Self-referent standards can also be useful in determining the initial goals of a client and the degree to which he or she is satisfied with gains made in treatment. A client seeking help for a sleep disorder may report substantial satisfaction with being able to obtain a period of four to five hours of uninterrupted sleep on a nightly basis if the client who initiated treatment were unable to sleep for even a few minutes each night. Self-referent standards in this case would not be a replacement for normative standards, however, as it may still be important for health reasons to strive for greater gains in treatment until the client is able to achieve the expected seven to eight hours of sleep per night.

STEP 4: COLLECTING ASSESSMENT DATA

Methods to Be Used

As psychologists make decisions about which aspects of the person-environment system are most relevant to measure; they must also decide which of many methods will be used to assess the targets that have been selected. These choices include the use of structured or unstructured clinical interviews, reviews of the individual's history from school or medical records, measurements of physiological functioning, a wide array of psychological tests self-reports from the individual, reports from significant others in the individual's life, and methods for the direct observation of behavior in the natural environment or in simulated conditions in the psychologist's office.

Interviews can be relatively open-ended, following the preferences or style of the individual psychologist, or highly structured in which a series of questions are asked in a prescribed manner and order regardless of who administers the interview.

Physiological measures can include a device to monitor heart rate, blood pressure, skin temperature, or muscle tension in a particular area of the body (e.g., the muscles of the jaw). Literally hundreds of psychological tests have been developed, most of which are administered by a psychologist to a client on an individual basis; a smaller number are administered in a group format. Psychological tests include measures of intelligence assessments of neuro-psychological functioning, objective tests of personality, and projective methods of assessing personality. Self-report measures have been designed to assess symptoms of specific problems such as depression, stressful life events, current concerns and problems, or perceptions of relationships with others. Direct observation methods are used to assess specific behaviors as they occur either in the natural environment or under simulated conditions in the therapist's office.

Typically a psychologist will draw on several of these methods in conducting a clinical assessment of a single case. The assessment process often begins with an interview as a means of obtaining general information about the individual and establishing rapport with the client. This initial interview may be followed by psychological testing, observations of behavior, and/or psychological assessment.

The choice of methods is influenced by a number of factors. For example, the age of the client is an important consideration. Adult assessment typically involves tests and interviews administered to the individual, whereas child assessment often involves information obtained from other informants (e.g., parents, teachers) on the child's behavior. The referral question also plays a significant role in the assessment methods that are used. The procedures used with an adult referred for a sexual dysfunction will be quite different than those used in response to a referral for an anxiety disorder. The selection of methods is also strongly influenced by the psychologist's theoretical orientation and taxonomy of psychopathology.

RELIABILITY AND VALIDITY

The most fundamental concern that a clinical psychologist must face when conducting a clinical assessment centers on the accuracy of the data she or he collects. Accuracy may be reflected in the consistency of the measure (reliability) and in the degree to which it reflects the construct of interest (Validity).

RELIABILITY

The first way to determine accuracy is to consider the reliability of the information that is obtained. Reliability refers to the consistency of the observation or measurements that are made and provides a first step towards ensuring trustworthy information.

First, there is **test-retest reliability** - the extent to which an individual makes similar responses to the same test stimuli on repeated occasions. If each time we test a person we get different responses, the test data may not be very useful. In some instances, clients may remember on the second occasion their responses from the first time. Or they may develop a kind of "test-wise ness" from the first test that influences their scores the second time around. In still other cases, clients may rehearse between testing occasions or show practice effects.

For all these reasons, another gauge of reliability is sometimes used - **equivalent-forms reliability**. Here, equivalent or parallel forms of a test are developed to avoid the preceding problems. Sometimes it is too expensive (in time or money) to develop an equivalent form or it is difficult or impossible to be sure the forms are really equivalent.

Under such circumstances, or when retesting is not practical, assessing **split-half reliability** is a possibility. This means that a test is divided into halves (usually odd-numbered items versus even-numbered items), and participants' scores on the two halves are compared. Split-half reliability also serves as one possible index of a test's internal consistency: Do the items on the test appear to be measuring the same thing? That is, are the items highly correlated with each other? The preferred method of assessing internal consistency reliability involves computing the average of all possible split-half correlations for a given test.

Another aspect of reliability is **inter-rater or inter-judge reliability** i.e. index of the degree of agreement between two or more raters or judges as to the level of a trait that is present or the presence/absence of a features or diagnosis.

VALIDITY

An assessment method's validity is as important as determining its reliability. Validity reflects the degree to which an assessment technique measures what it is designed or intended to measure. Validity is determined by using maximally different methods to measure the same construct. Several different types of validity exist.

Content Validity indicates the degree to which a group of test items actually covers the various aspects of the variable under study.

Predictive Validity is demonstrated when test scores accurately predict some behavior or event in the future.

Concurrent Validity involves relating today's test scores to a concurrent criterion.

Finally, **Construct Validity** is shown when test scores relate to other measures or behaviors in a logical, theoretically expected fashion.

STEP 5: MAKING DECISIONS

The information obtained in the psychological assessment process is valuable only to the extent that it can be used in making important decisions about the person or persons who are the focus of assessment.

The goals of assessment—diagnosis, screening, prediction, and evaluation of intervention—determine the types of decisions that are made. The decisions that are made on the basis of psychological assessments can have profound effects on people's lives. The process of making decisions is complex and the stakes are high. Therefore, it is important to understand the factors that influence the decisions and judgments made by clinical psychologists and ways to optimize the quality of these decisions.

CLINICAL VERSUS STATISTICAL PREDICTION

Because people, including clinical psychologists, are faced with a number of obstacles in the process of making judgments about the behavior of other people, how can the judgment process be improved? The issue is relatively straightforward. When clinicians use psychological assessment data, what is the best way for them to make judgments and predictions about individuals? Should the data be combined using statistical methods to make estimates of probability, or should the information be combined more subjectively by the individual clinician based on his or her experience? Statistical or actuarial judgments or predictions are made on the basis of data on large numbers of individual; that can be used to determine the rates at which certain events or relationships take place (base rates) and the probability that an event will happen in the future in light of current information.

Over 100 studies have compared the use of the clinical and statistical methods in making judgments in psychological assessment, including diagnostic decisions, evaluations of brain dysfunction, and predictions of future violent behavior, predictions of work or school performance and predictions of positive response to various forms of psychological and pharmacological treatment. The evidence clearly shows the superiority of statistical methods in making judgments. One of the reasons for the relative superiority of statistically based judgments is that they are perfectly reliable—they always combine the available information in exactly the same way. Human information processing, as we have already explained, is not perfectly reliable but is prone to a certain inherent level of inconsistency and error.

Findings from research comparing clinical and statistical methods do not mean that the clinical decision-making process should be cold and inhuman, carried out solely by computers. The role of the clinician is crucial for certain types of tasks that cannot be conducted adequately by purely empirical methods, including the generation of hypotheses and the use of theory in formulating questions. The important point is that statistical methods are superior for certain aspects of the process of psychological assessment, freeing psychologists to carry out other tasks for which they are uniquely suited.

STEP 6: COMMUNICATING THE INFORMATION

After collecting information that is pertinent to the evaluation of an individual and the environments in which she or he functions, scoring the measures that were used, and interpreting the scores, the psychologist is faced with the final task of clinical assessment: communicating this information and interpretations to the interested parties. This communication typically takes the form of a written psychological report that is shared with the client, other professionals (physicians, teachers, and other mental health professionals), a court of law, or family members who are responsible for the client.

The challenges for psychologists in conveying assessment information are many, including the need to be accurate, to provide an explanation of the basis for their judgments, and to communicate free of technical jargon.

Just as the assessment process shares many features with the process of research, a good psychological report shares many features with a good research article. It should begin with an introduction to the case, including a description of the referral questions that were asked or the hypotheses that were tested. The methods or assessment procedures that were used should be described in sufficient detail so that the reader can understand and evaluate their quality. The results are reported next—a clear and succinct summary of the data. Finally, a discussion and interpretation of the results is provided, including recommendations for future assessment or intervention.

ETHICAL ISSUES IN ASSESSMENT

Psychologists are guided by a general set of rules or a code of conduct that includes rules for ethical conduct in the psychological assessment process. These guidelines have been developed to protect the best interests of the clients that are served by professional psychologists. Foremost among these guidelines are concerns for protecting clients from abuse by actions of psychologists, ensuring the confidentiality of information that is obtained, protecting clients' rights to privacy, ensuring the use of procedures that have well-established reliability and validity, and using the results of psychological assessment data in the best interests of clients.

Psychologists often obtain information about clients that reflects the most personal and intimate aspects of their lives. This information is shared with a psychologist in the strictest of confidence and with the expectation that no one has a right to access that information without the full informed consent of the client. Therefore, clients have the right to be aware of and to understand any and all information that has been obtained as part of the assessment process, to know where and how that information is stored, and to regulate who has access to that information.

The clearest example of the need to protect confidentiality centers on the disposition of the results of psychological tests and written psychological reports. How are the data and reports stored? How long are they retained? Who has access to test results and reports? Information from clinical assessments of individuals is always considered confidential, regardless of the length of time since the data were collected. Data that were collected from a person's past must be considered cautiously, because the characteristics that were measured may have changed significantly over time.

Although the concepts of reliability and validity may appear to be dry statistical abstractions, they are essential in the fair and ethical treatment of individuals. The use of a measure that has either poor or unknown reliability may produce information about a client that is not trustworthy. A lack of reliability in a measure indicates that if that test or procedure were used again it would not be expected to produce the same results. Therefore, an erroneous judgment could be made regarding a client's welfare on the basis of this unreliable information. If a test or procedure is not reliable it cannot be valid. Lack of validity indicates that the results are not an accurate representation of the psychological functioning of the individual.

THE CLINICAL INTERVIEW

DEFINITION OF INTERVIEW

A situation of primarily vocal communication, more or less voluntarily integrated, on a progressively unfolding expert-client basis for the purpose of elucidating characteristic patterns of living of the patients, client, or subject, which pattern he/she experiences as particularly troublesome or especially valuable, and in the revealing of which he expects to derive benefit..

According to “Bingham” and “Moore” The clinical interview is a conversation with a purpose but as the purpose differ the area of the interview also differs.

INTRODUCTION OF INTERVIEW

Almost all professions count interviewing as chief technique for gathering data and making decisions. For politicians, consumers, psychiatrists, employers, or people in general, interviewing has always been a major tool. As with any activity that is engaged in frequently, people sometime take interview for granted or believe that it involve no special skills; they can easily overestimate their understanding of the interview process. Although many people seem awed by the mystique of projective tests or impressed by the psychometric intricacies of objective tests.

The assessment interview is at once the most basic and the most serviceable technique used by the clinical psychologists. In the hands of a skilled clinician, its wide range of applications and adoptability make it a major instrument for clinical decision making, understanding, and predictions. But for all this, we must not lose sight of the fact that the clinical interview is not greater than the skill and sensitivity of clinicians who use it.

IMPORTANT THINGS TO KNOW ABOUT CLINICAL INTERVIEWS

1. It is not a cross-examination but rather a process during which the interviewer must be aware of the client's voice intonation, rate of speech, as well as non-verbal messages such as facial expression, posture, and gestures.
2. Although it is sometimes used as the sole method if assessment, it is more often used along with several of the other methods.
3. It serves as the basic context for almost all other psychological assessments.
4. It is t he most widely used clinical assessment method.

ADVANTAGES OF THE CLINICAL INTERVIEW

1. Inexpensive
2. Taps both verbal and non verbal behavior
3. Portable
4. Flexible
5. Facilitates the building of a therapeutic relationship

TYPES OF INTERVIEW

There are many different forms of interviews conducted by psychologists. Some interviews are conducted prior to admission to a clinic or hospital, some are conducted to determine if a patient is in danger of injuring themselves or someone else, some are conducted to determine a diagnosis. Whereas some Interviews are highly structured with specific questions asked for all patients, others are unstructured and spontaneous. In this section the common forms of clinical interviews will be briefly discussed. Some important forms of interview are:

- **The intake / admission interview**
- **The case history interview**
- **Mental status examination interview**
- **The crisis interview**
- **Diagnostic interview**
- **Structured interview**

THE INTAKE/ADMISSION INTERVIEW

According to Watson;

“This type of interview is usually concerned with clarification of the patient’s percentage complaints, the steps he has taken previously to resolve his difficulties and his expectances in regard to what may be done for him”.

The purpose of the initial intake interview or admission interview is to develop a better understanding of the patient’s symptoms or concerns in order to recommend the most appropriate treatment or intervention plan. Whether the interview is conducted for admission to a hospital, an outpatient clinic, a private practice, or some other setting the initial interview attempts to evaluate the patient’s situation as efficiently as possible.

Ordinarily a psychiatric social worker conducts this interview; however, upon occasion, the psychologist, one of the physician, or a psychiatric nurse may serve as intake interviewer. The basic question to be dealt with is “Why is the patient here? i.e., what does she say is the matter with him? Important but secondary questions involve information about previous hospitalization, the name of his doctors, what the patient expects from treatment, his availability for treatment, and the like.

Although typically brief, the intake or admission interview is extremely important in conserving the time of other professional staff members and in sparing the clinic or hospital for occasional embarrassing or awkward situations. The patient may in some instances desire treatment which a particular clinic may not be prepared to give. Certain hospitals, for example, do not handle alcoholic or narcotic addiction cases; thus the patient can be at once referred to an appropriate institution, saving time for the examining psychiatrist, psychologist, the various attendants, and for the patient himself.

Similarly, the awkward consequences of an overly casual admission procedure can be avoided by a well planned interview. Hospital staff members can relate many anecdotes of relatives who were mistaken for the patient himself, of surgical patients who were given diagnostic psychiatric interviews, or of salesmen who were escorted to a room and confronted with a personality test.

A careful intake interview will guard against such mistakes. It should be noted that every patient will not be able to state coherently what the nature of his trouble may be. But even the unclear replies can be

highly revealing, and the astute intake interviewer can report significant observation of the patient's behavior which he may not reveal again for some time or which may be missed by later examiners.

Ordinarily, the diagnostic and treatment session which come at some time after the intake interview are carried out by another, different staff person. This does not mean however, that therapy begins later. The formal label of "psychotherapy" it is true, is given to the later procedures, but real therapy, in the sense of patient's attitude and his motivation to get well, begins at the time of the patient's admittance. It is no exaggeration to assert that a bungled intake interview prolong treatment while an effective one can shorten it.

CASE HISTORY INTERVIEW

In many hospitals and clinics the intake or admission interview is followed immediately by the personal and social history interview. The same person usually a psychiatric social worker, commonly conduct both interviews, often in one sitting. Sources of information other than the patient himself are, of course, utilized when completing a personal and social history report. Frequently, the patient does not remember or can not for other reasons communicate material which may have a bearing upon his problem. Thus, information from friends, relatives, hospital, military, and other records are also used for the history. But whatever the source of information, the purposes of the social and personal history report is to gather information which will be helpful in diagnosing and treating the patient's disorder.

Frequent job changes, for example, may be evidence of general instability. The adult schizophrenic who showed marked apathy and withdrawal symptoms as a preschool child is probably more severely afflicted than patients whom symptoms appeared more recently. Neurotic symptoms which appear after the divorce of parents may have different etiology than similar symptoms which appear after the head injury.

In most instances a standardized form or social history guide of some sort is used. There are advantages in using a standardized printed form, as Louttite has noted in that pertinent information will not be skipped; however as he also notes, a rigid dependency upon the form may ensue. Certain obvious information may not be recorded because the form does not call for it or details which are unimportant for a particular case may be set down in time wasting abundance. Obviously the common sense of the interviewer is the answer to such problems.

The typical information obtained in a personal and social history includes material on the patient's early life, with particular attention paid to family relationship and general environment. Also included are data on the patient's educational and vocational history, neuropathic traits, his habits and recreations, as well as other material. Obviously much of this information can be obtained only by direct questioning. Some patients are threatened by situations which require specific answers, and they may show panic reactions of varying degree. Others will lie, perhaps because they cannot remember and do not wish to say so, but more often because painful memories are awakened of jail sentences, of divorce, of previous hospitalization, or the like. Most patients, of course, are truthful, but only in their cultural fashion.

It is this area that the skill of the interviewer is brought out. While much of the information requested is factual, the manner in which the patient communicates his facts may be quite misleading.

The fact that an occasional patient will lie about his personal social history, even about trivial matters, is sometimes irritating or disheartening to the newcomer to the interviewing situation. Such falsification is not a reflection upon the interviewer's skill or comportment but rather upon the reason why the patient is being interviewed. He is a patient. He may be confused, a psychopath, or something else; but he is sick. This may seem like unnecessary emphasis; yet every clinician should be prepared to ward off feelings of indignation or humiliation which may arise when he learns that virtually every fact he so laboriously recorded, from age and address to family history and vocation, is false. This happens with extreme rarity, of course; but it happen to almost every clinician sooner or later. When it does, and if

one is taken in, a little self directed humor helps restore a sense of proportion. Then a firm resolution to check other information sources can turn the experiences to one's advantage.

MENTAL STATUS EXAMINATION INTERVIEW

Often a mental status examination interview is conducted to screen the patient's level of psychological functioning and the presence or absence of abnormal mental phenomena such as delusions, delirium, or dementia. Mental status exams include a brief evaluation and observation of the patient's appearance and manner, speech characteristics, mood, thought processes, insight, judgment, attention, concentration, memory, and orientation.

Results from the mental status examination provide preliminary information about the likely psychiatric diagnosis experienced by the patient as well as offering some direction for further assessment and intervention (e.g. referred to a specialist, admission to psychiatric unit, and evaluation for medical problems that impact psychological functioning). For instance, mental status interviews typically include questions and tasks to determine orientation to time (e.g., "what day is it? What month is it?"), place (e.g., Where are you now? Which hospital are you in?), and person ("who am I who is the president of United States?"). Also, the mental status interview assesses short term memory (e.g. "I am going to name three objects I'd like you to try and remember: dog, pencil, and vase") and attention-concentration (e.g., "count down by 7s starting at 100. For example 100, 93, and so forth").

While there are some mental status examination that are structured resulting in scores that can be compared to national norms, most are unstructured and do not offer a scoring or norming option. During the examination the interviewer notes any unusual behavior or answers to questions that might be indicative of psychiatric disturbance. For example, being unaware of the month, year, or the name of the current president of the United States usually indicate mental problems. This can result in bias based on the interviewer's clinical judgment during and evaluation.

THE CRISIS INTERVIEW

A crisis interview occur when the patient is in the middle of a significant and often traumatic or life threatening crisis. The psychologists or the mental health professionals (e.g., a trained volunteer) might encounter such a situation while working at a suicide or poison control hotline, an emergency room, a community mental health clinic, a student health service on campus, or in many other settings. The nature of the emergency dictates a rapid, "get to the point" style of interview as well as quick decision making in the context of a calming style. For example, it may be critical to determine whether the person is at significant risk of hurting him- or herself or others. Or it may be important to determine whether the alcohol, drugs, or any other substances are used, so as to make sure that the clinician interviews the person in a calming and clear headed manner while asking critical questions in order to deal with the situation effectively.

The interviewer may need to be more directive (e.g., encouraging the person to phone the police, unload a gun, provide instructions to induce vomiting, or step away from a tall building or bridge); break confidentiality if the person (or someone else, such as a child) is in serious and immediate danger; or enlist the help of others (e.g., police department, ambulance).

THE DIAGNOSTIC INTERVIEW

The purpose of the screening or diagnostic interview is to assist the clinician in his attempt to understand the patient.

If the level of diagnostic understanding required is merely a separation of the fit from the unfit, as in military neuro-psychiatric examinations, the interview task is one of screening. That is, after a brief interview the interviewee be adjusted fit for specific duties, such as a regular military assignment, or he may be referred for prolonged observation and extended psychological testing. Occasionally, limit or

trial duty may be recommended as an alternative to regular duty of psychological observation. Upon other occasions the diagnostic task is highly specific, and a detailed level of understanding is required. This may involve a diagnostic label as categorized as “paranoid schizophrenia” and a description of personality dynamics. In the later case primary dependence is not placed upon the interview alone, for psychological tests play a most important role in such detailed diagnostic procedures.

In the diagnostic interview, while the examination progresses; the interviewer observes the interviewee’s behavior as well as noticing the content of his answers. Thus thighs pressed together, a mincing walk, and fluttery feminine gestures in a male should lead the interviewer to suspect and investigate the possibility of homosexuality. The bubbling, enthusiastic replies and exaggerated gestures in another interview should lead the interviewer to hypothesize tentatively a manic condition and seek further evidence. Similarly, as Wittson, et al. noted, the psychopath often gives evidence of his deviation by his utter impersonality or even belligerence towards the interviewer.

Ordinarily, brief neuro psychiatric interviews are not oriented towards future psychotherapeutic activity because most of the interviews have no need of therapy. However, it is not difficult to adopt the procedure of the brief interviews so that those who seem in need of treatment are rendered more receptive to the idea. Thus this kind of interview is used to describe that whether an individual needs help or not.

STRUCTURED INTERVIEW

In an effort to increase the reliability and validity of clinical interviews, a number of structured interviews have been developed. These interviews include very specific questions asked in a detailed flow chart format. The goal is to obtain necessary information, to make an appropriate diagnosis, to determine whether a patient is appropriate for a specific treatment or research program, and to secure critical data that are needed for patient care. The questions are generally organized and developed in a decision tree format. If a patient answers yes to particular questions (for example, about panic), the list of additional questions might be asked to obtain details and clarification.

RELIABILITY AND VALIDITY OF INTERVIEWS

As with any form of psychological assessment, it is important to evaluate the reliability and validity of interviews.

RELIABILITY

The reliability of an interview is typically evaluated in terms of the levels of agreement between at least two raters who evaluated the same patients or client, by agreement we mean consensus on diagnosis assigned, on ratings of levels of personality traits, or any other type of summary information derived from an interview. This is often referred as inter-rater reliability.

Standardized (structured) interviews with clear scoring instructions will be more reliable than unstructured interviews. The reason is that structured interviews reduce both information variance and criterion variance. Information variance refers to the variation in the question that clinicians ask, the observations that are made during the interview, and the method of integrating the information that is obtained. Criterion variance refers to variations in scoring thresholds among clinicians.

Another type of reliability is the test-retest interviews-the consistency of scores or diagnoses across time. We expect the test re test reliability of an interview quite high when the intervening time period between the initial testing and the retest testing is short. However when the intervening time period is long test retest reliability suffers.

VALIDITY

The validity of an interview concerns how well the interview measures what it is intended to measure. The validity of any type of psychological measures can take many forms.

CONTENT VALIDITY:-refers to the measure's comprehensiveness in assessing the variable of interest. In other words, does it do a good job of adequately measuring all important aspects of the construct of interest?

CRITERION RELATED VALIDITY:-refers to the ability of a measure to predict (correlate with) scores on other relevant measures. These measures may be administered concurrently with the interview (concurrent validity) or at some point in the future (predictive) validity

DISCRIMINANT VALIDITY:-refers to the interview's ability to not correlate with measures that are not theoretically related to the construct being measured.

CONSTRUCT VALIDITY:-is used to refer to all these aspects of validity. Thus many researchers describe the process of developing and validating a measure as a process of construct validity.

In case of structured diagnostic interviews, content validity is usually assumed, because these interviews were developed to measure the DSM criteria for specific mental disorders. That leaves us in need for validation efforts aimed at establishing an interview's criterion-related, discriminant, and construct validity.

SUGGESTIONS TO IMPROVE RELIABILITY AND VALIDITY

1. Whenever possible use a structured interview.
2. If a structured interview does not exist for your purpose, consider developing one.
3. Whether you are using a structured or unstructured interview, certain interviewing skills are essential.
4. Be aware of the patient's motives and expectancies with regard to the interview.
5. Be aware of your expectations, biases, and cultural values.

FACTORS THAT INFLUENCE INTERVIEWS

Many factors influence on the productivity and utility of data obtained from interview. Some involve the physical setting. Others are related to the nature of the patient. A mature communicative patient may not cooperate regardless of the level of the interviewer's skill. Few interviewers are effective with every patient. Several factors or skills, however, can increase the likelihood that interviews will be productive. Training and supervised experiences in interviewing are very important. Techniques that work well for one interview can be notably less effective for another; there is crucial interaction between techniques and interviewer. This is why gaining experience in a supervised setting is so important; it enables the interviewer to achieve some awareness of the nature of this interaction. Training, then, involves not just a simple memorization of rules, but rather, a growing knowledge of the relationships among rules, the concrete situation being confronted, and one's own impact in interview situation.

1.THE PHYSICAL SETTING

An interview can be conducted any where that the two people can meet and interact. The best interviewing conditions are characterized by privacy, freedom from interruption, and some control of both inside and out side sounds. Nothing is more damaging to the continuity of an interview then a

phone that rings relentlessly, a secretary's query, or an imperative knock on the door. Such interruptions are extremely disruptive.

The general appearance of the room should suggest comfort and yet have a professional flavor about it.

2. NOTE-TAKING AND RECORDING

All contacts with the client ultimately need to be documented. However, there is some debate over whether notes should be taken during an interview. Although there are few absolutes, in general, it would seem desirable to take occasional notes during an interview. A few key phrases jotted down will help the clinicians to recall. Most clinicians have had the experience of feeling that the material in an interview is so important that there is no need to take notes. The material will easily be remembered. However, after having a few additional patients the clinicians cannot be able to recall much for their earlier interview. Therefore, a moderate amount of note - taking seems worthwhile. Most patients will not be troubled by it, and if one should be, the topic can be discussed.

However, any attempt at taking verbatim note should be avoided. One danger in taking verbatim is that this practice may prevent the clinicians from attending fully to the essence of the patient's verbalizations. An overriding compulsion to get it all down can detract from a genuine understanding of the nuances and significance of the patient's remarks. In addition, excessive note taking tends to prevent the clinicians from observing the patient and from noting subtle changes of expression or slight changes in body position.

With today's technology, it is easy to audio tape or videotape interviews. Under no circumstances should be this done with out the patient' fully informed consent.

3.RAPPORT

Report is the word often used to characterize the relationship between patient and clinician. Rapport involves a comfortable atmosphere and a mutual understanding of the purpose of the interview. Good rapport can be primary instrument by which the clinicians achieve the purpose of the interview. A cold, hostile or adversarial relationship is not likely to be constructive. Although a positive atmosphere is certainly not the sole ingredient for a productive interview, it is usually a necessary one. Whatever skills the interviewer possess will surely be rendered more effective in proportion to the interview's capacity to establish a positive relationship.

4. SETTING THE RIGHT TONE

Experienced interviewers have learned and repeatedly confirmed that the atmosphere most conducive to the successful elicitation of information is one of mutual respect.

5. GETTING THE INTERVIEW OFF TO A GOD START

One of the first tasks, in fact, obligations, of the clinician is to make sure that the client understands the purpose of the interview as clearly as he is capable of understanding.

COMPONENTS OF GOOD LISTENING

-elimination of distraction

-alertness

-concentration

-patience

-Open-mindedness

6. ADJUSTMENT

Adjust the sequence of topics to be discussed to the anxiety level of the informant.

7. MOVING RAPIDLY THROUGH THE INTERVIEW

In personal interviewing and, even more important, in case history interviewing a rapid fire technique may result in greater reliability.

8. ASKING QUESTIONS STRAIGHTFORWARDLY

Johnson, et al., remarked, having laid a solid foundation of rapport, mutual understanding and respect, it is best to ask questions in a direct manner.

9. CONSIDERABLE TACT AND SKILL MUST BE USED IN HANDLING PAUSES

We should not be too eager to make and answer for a client and should give him time to think through his answer carefully. On the other hand, we must not allow pauses to become so long as to become painful or awkward and this make the client uncomfortable.

10. ATTEMPT TO GET BENEATH SUPERFICIAL ANSWER

We should attempt to rephrase or ask additional questions when client's answers are obviously superficial.

11. NOTE DISCREPANCIES IN THE ACCOUNT AND CHECK THEM

When inconsistencies are noted, they should not be ignored, but should be checked as unobtrusively as possible without challenging the client's veracity.

12. HANDLING EMOTIONAL SCENES TACTFULLY

A moderate amount of crying, weeping, anger, or hostility is to be expected and is frequently of sign a good rapport. However it is responsibility of the clinician to maintain control of the situation and not to allow it to get out of hand, or the client to become too depressed.

13. PREPAREDNESS

Be prepared for the questions directed to you by the informant. Clinician's answer will depend upon his role in clinic routine i.e., what his answers will mean in terms of helping or hindering the progress of the interview.

POTENTIAL THREATS OF EFFECTIVE INTERVIEWING

BIASNESS

Interviewers may be biased. Their personality, theoretical orientation, interests, values, previous experiences, cultural background, and other factors may influence how they conduct an interview, what they attend to, and what they conclude. Interviewers may consciously or unconsciously distort

information collected during an interview based on their own slant on the patient or the patient's problems.

For example, a psychologist is an expert on child sexual abuse. She treats children who have been sexually abused as children and publishes professional articles and books on the topic. She is often asked to give lectures around the country on the subject. When a patient describes symptoms often associated with child sexual abuse such as depression, anxiety, low self esteem, relationship conflicts, and sexually concerns, the psychologists assume that the symptoms are associated with sexual abuse. When a patient denies any experience of sexual abuse, the psychologist assumes that the patient has repressed or forgotten the traumatic memory. She then works to help the patient uncover the repressed memory in order to realize that they have been abused. Clearly, this example illustrates how bias can lead to distorted or even destructive approaches.

RELIABILITY AND VALIDITY

Reliability and validity may also be threatened. For example, if two or more interviewers conduct independent interviews with a patient, they may or may not end up with the same diagnosis, hypothesis, and treatment plans. Further more; patients may not report the same information when questioned may be several different interviews. Interviewer gender, race, age, and skill level are some of the factors that may affect patient response during an interview (Grantham, 1973).

Emotional level may also have an impact on reporting of information. For example, personal questions regarding sexual behavior, alcohol use, child abuse, or other sensitive issues may elicit varying responses from patients under different circumstances. Reliability and validity may be enhanced by using structured interviews, asking similar questions in different ways, using multiple interviewers, and supplementing interview information from other sources (e.g., medical records, observers, questionnaires).

THE ASSESSMENT OF INTELLIGENCE

The history of clinical psychology is inextricably tied to the assessment of intelligence. Without the success in this and related assessment enterprises, there might not have been a field of clinical psychology. As the years passed, however; clinicians became increasingly interested in the more "glamorous" aspects of the profession, such as therapy. Assessment began to take a back seat, and technicians started to become the assessors, as they had been prior to World War II. However; all this is beginning to change. Not only is the value of assessment being rediscovered, but intelligence tests in particular remain prominent in the clinician's arsenal of assessment devices.

THE CONCEPT OF INTELLIGENCE

The concept of intelligence has presented clinical psychology with one of its greatest dilemmas. On the one hand, psychologists have been pressured for almost 100 years to quantify individual differences in intellectual functioning. On the other hand, intelligence has remained one of the most difficult and controversial psychological construct to define and measure. The impetus to define and quantify intelligence comes from both practical and scientific forces. The practical significance lies in the potential use of measures of intelligence in predicting academic and work potential and achievement. From a scientific perspective, precise understanding of how to measure intelligence can contribute to our comprehension of an important aspect of human behavior and functioning.

Two issues that have plagued psychologists from the beginning are still not resolved. First, exactly what is meant by the term *intelligence*? Second, how do we develop valid instruments for measuring it? We will address both questions. But first we need to review the psychometric concepts of reliability and validity.

RELIABILITY AND VALIDITY

RELIABILITY

With regard to psychological tests, reliability refers to the consistency with which individuals respond to test stimuli. There are several ways of evaluating reliability.

First, there is *test-retest reliability*-the extent to which an individual makes similar responses to the same test stimuli on repeated occasions. If each time we test a person we get different responses, the test data may not be very useful. In some instances, clients may remember on the second occasion their responses from the first time. Or they may develop a kind of "**test-wiseness**" from the first test that influences their scores the second time around. In still other cases, clients may rehearse between testing occasions or show practice effects. For all these reasons, another gauge of reliability is sometimes *used-equivalent-forms reliability*. Here, equivalent or parallel forms of a test are developed to avoid the preceding problems.

Sometimes it is too expensive (in time or money) to develop an equivalent form or it is difficult or impossible to be sure the forms are really equivalent. Under such circumstances, or when retesting is not practical, assessing *split-half reliability* is a possibility. This means that a test is divided into halves (usually odd-numbered items versus even-numbered items), and participants' scores on the two halves are compared. Split-half reliability also serves as one possible index of a test's *internal consistency*: Do the items on the test appear to be measuring the same thing? That is, are the items highly correlated with each other? The preferred method of assessing internal consistency reliability involves computing the average of all possible split-half correlations for a given test.

Another aspect of reliability, *inter-rater* or *inter-judge reliability* is the index of the degree of agreement between two or more raters or judges as to the level of a trait that is present or the presence/absence of a features or diagnosis.

VALIDITY

In general, validity refers to the extent to which an assessment technique measures what it is supposed to measure. There are several forms of validity.

Content Validity indicates the degree to which a group of test items actually covers the various aspects of the variable under study.

Predictive Validity is demonstrated when test scores accurately predict some behavior or event in the future.

Concurrent Validity involves relating today's test scores to a concurrent criterion.

Finally, **Construct Validity** is shown when test scores relate to other measures or behaviors in a logical, theoretically expected fashion.

DEFINITION OF INTELLIGENCE

Intelligence is a **hypothetical construct**; that is, intelligence is a concept that exists only in the way that psychologists and the public chose to define it. You cannot touch intelligence nor can you directly observe it. You can only observe the consequences of intelligence as they are reflected in the behavior and performance of individual.

There is no universally accepted definition of intelligence. However, over the years, most have fallen into one of three classes:

1. Definitions that emphasize adjustment or adaptation to the environment-adaptability to new situations, the capacity to deal with a range of situations.
2. Definitions that focus on the ability to learn-on educability in the broad sense of the terms.
3. Definitions that emphasize abstract thinking the ability to use a wide range of symbols and concepts, the ability to use both verbal and numerical symbols.

To illustrate a little of the long-standing diversity of definitions, consider the following examples:

Intelligence is the aggregate or global capacity of the individual to act purpose-fully, to think rationally, and to deal effectively with his environment. (Wechsler, 1939)

As a concept, intelligence refers to the whole class of cognitive behaviors which reflects an individual's capacity to solve problems with insight, to adapt himself to new situations, to think abstractly, and to profit from his experience. (Robinson & Robinson, 1965)

Intelligence is expressed in terms of adaptive, goal-directed behavior the subset of such behavior that is labeled "intelligent" seems to be determined in large part by cultural or societal norms. (Sternberg & Salter, 1982)

Intelligence is a very general mental capability that, among other things, involves the ability to reason, plan, solve problems, and think has very few traits in common-they resemble the prototype along

different dimensions. Thus, there is no such thing as chariness - resemblance is an external fact and not an internal essence. There can be no process-based definition of intelligence, because it is not a unitary quality. It is a resemblance between two individuals, one real and the other prototypical. (Spearman)

THEORIES OF INTELLIGENCE

There have been many theoretical approaches to the understanding of intelligence. These include psychometric theories, developmental theories, neuropsychological theories, and information-processing theories. We present only a brief overview of several leading theories here.

FACTOR ANALYTICAL APPROACHES

Spearman (1927), the father of factor analysis, posited the existence of a **g** factor (general intelligence) and **S** factors (specific intelligence). The elements that tests have in common are represented by **g**, whereas the elements unique to a given test are **S** factors. Basically, however, Spearman's message, buttressed by factor analytic evidence, was that intelligence is a broad, generalized entity.

A number of individuals took issue with Spearman's contentions, including E. L. Thorndike and L. L. Thurstone. For example, Thurstone (1938) presented evidence (based on a factor analysis of 57 separate tests that had been administered to 240 participants) for a series of "group" factors rather than the almighty **g** factor. Ultimately, Thurstone described seven group factors which he labeled number, word fluency, verbal meaning, perceptual speed, space, reasoning, and memory.

CATTELL'S THEORY

The work of R. B. Cattell (1987) emphasizes the centrality of **g**. At the same time, Cattell has offered a tentative list of 17 primary ability concepts. He has described two important second-order factors that seem to represent a partitioning of Spearman's **g** into two components: **fluid ability** (the person's genetically based intellectual capacity) and **crystallized ability** (the capacities, tapped by the usual standardized intelligence test that can be attributed to culture-based learning). Essentially, Cattell's approach might be described as a hierarchical model of intelligence.

GUILFORD'S THEORY: The views of Guilford (1967) were quite different from those of Cattell, Spearman, Thurstone, and most other psychometricians. Guilford proposed a *Structure of the Intellect (SOI) model* and then used a variety of statistical and factor analytic techniques to test it. Whereas other psychometric approaches generally attempted to infer a model, Guilford used the model as a guide in generating data.

Guilford reasoned that the components of intelligence could be organized into three dimensions: operations, contents, and products. The operations are cognition, memory, divergent production (constructing logical alternatives), Convergent production (constructing logic-tight arguments), and evaluation. The content dimension involves the areas of information in which the operations are performed: figural, symbolic, semantic, and behavioral. Finally, when a particular mental operation is applied to a specific type of content, there are six possible products: units, classes, systems, relations, transformations, and implications. If we contemplate all possible combinations, we arrive at 120 separate intellectual abilities. Perhaps the most widely held reservation about Guilford's approach is that it is taxonomy or classification rather than a theory.

RECENT DEVELOPMENTS: Traditionally, intelligence tests have been constructed to assess what we know or can do. Recent approaches, however, have begun to take on a highly cognitive or information-processing look. For example, some researchers try to describe a person's moment-by-moment attempts to solve a problem—from the moment a stimulus registers to the person's verbal or motor response. This is a more dynamic view of intelligence than the older theories of mental components.

Some of these researchers have focused on speed of information processing and others on strategies of processing. A number of levels of processing have been studied, including speed of processing, speed in making choices in response to stimuli, and speed with which individuals can extract various aspects of language from their long-term memory. But many problems and questions remain (Gardner, 1983). Is there a central processing mechanism for information? How do the processing elements change as the person develops? Are there general problem-solving skills or merely skills specific to certain ability areas? Perhaps time will tell.

Gardner (1983) has described a theory of *multiple intelligences*. Human intellectual competence involves a set of problem-solving skills that enable the person to resolve problems or difficulties. Sometimes this results in the potential for acquiring new information. Gardner suggests that there is a family of six intelligences: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, and personal. For example, the personal refers both to access to one's own feeling life and to the ability to notice and make distinctions among other individuals. A major criticism of Gardner's theory is that some of his proposed "**intelligences**" may be better conceptualized as "**talents**" than as forms of intelligence. Nevertheless, Gardner's views have attracted a great deal of attention from psychologists and educators alike.

To cite another example of a theory of multiple forms of intelligence, **Sternberg** (1985, 1991) has proposed a *triarchic theory of intelligence*. He maintains that people function on the basis of three aspects of intelligence: componential, experiential, and contextual.

This approach deemphasizes speed and accuracy of performance. Instead, the emphasis is on planning responses and monitoring them. The componential aspect refers to analytical thinking; high scores would characterize the person who is a good test-taker. The experiential aspect relates to creative thinking and characterizes the person who can take separate elements of experience and combine them insightfully. Finally, the contextual aspect is seen in the person who is "street smart"-one who knows how to play the game and can successfully manipulate the environment.

According to Sternberg, a person's performance is governed by these three aspects of intelligence. Other investigators are particularly interested in social competence as an aspect of intelligence (Sternberg & Wagner, 1986). However, whether all the foregoing can account for individual differences or is just a theory of cognition is debatable.

Although Spearman, Thurstone, and others may seem to have given way to Cattell, Guilford, Gardner, or Sternberg, clinicians' day-to-day use of tests suggests that they have not really outgrown the *g* factor of Spearman or the group factors of Thurstone. The whole notion of a single IQ score that can represent the individual's intelligence strongly implies that we are trying to discover how much *g* the person has. At the same time, however, most current intelligence tests are composed of subtests, so that the total IQ represents some average of subtest scores.

This implies that, to some extent at least, we have also accepted Thurstone's group factors. We seem to want to identify and quantify how much intelligence the person has, yet we cannot escape the belief that intelligence is somehow patterned-that two people may have the same overall IQ score and still differ in specific abilities. Thus, it would appear that practicing clinicians think more in line with Spearman or Thurstone and are as yet little affected by the recent information processing developments.

HISTORY OF INTELLIGENCE TESTING

Two important historical developments in the latter half of the nineteenth century greatly influenced the ultimate introduction of measures of intelligence (Thorndike, 1997). First, compulsory education in the United States and other countries resulted in a very diverse student body. Many students came from "uneducated" families or families that did not speak the native tongue. As a result, the failure rate in

schools shot up dramatically. In order to preserve resources, there was pressure to identify those most likely to succeed in school. Second, psychological scientists believed, and ultimately demonstrated, that mental abilities could be measured. Although early attempts focused primarily on measures of sensory acuity and reaction time (for example, Francis Galton, James McKeen Cattell), the groundwork was laid in place.

Alfred Binet and his collaborator, Theodore Simon, became leaders in the intelligence testing movement when they devised the Binet-Simon test to identify individual differences in mental functioning. Binet's original purpose was to develop an objective method of identifying those truly lacking in academic ability (as opposed to those with behavior problems). Like others of the day, Binet and Simon regarded intelligence as a "faculty" that was inherited, although they also spoke of it as affected by training and opportunity. With the interest in quantifying intellectual performance and with the continuing growth of compulsory education in Europe and North America, intelligence testing became firmly entrenched (Thorndike, 1997).

Institutions such as schools, industries, military forces, and governments were, by their nature, interested in individual differences (such as levels of intelligence) that might affect performance in those settings; therefore, intelligence testing prospered (Herrnstein & Murray, 1994). For many years, the critical importance and widespread use of intelligence tests went largely unchallenged. However, by the end of the 1960s, everyone seemed to be attacking the validity of these tests. Basically, the argument was that such tests discriminate through the inclusion of unfair items.

As a result of a lengthy civil rights suit (*Larvy P v. Wilson Riles*) begun in 1971, the California State Board of Education in 1975 imposed a moratorium on the use of intelligence tests to assess disabilities in African Americans. The court held that IQ testing is prejudicial to African American children and tends to place them, without real justification, in allegedly stigmatizing programs for cognitively impaired individuals.

Others (for example, N. Lambert, 1981) have disputed the court's judgment, however. Some African Americans contemplated a court challenge of the ruling, claiming it assumed that African Americans would do poorly on the tests. Still others argued that IQ testing is not a social evil but the principal means by which we can right the wrongs imposed upon minorities by a devastating environment.

The **most widely used intelligence tests** in the United States are those originally developed by psychologist David Wechsler during the 1940's and 1950's, building on existing tests of the day—including the Stanford-Binet the Army Alpha and Beta tests, and the Bellevue intelligence scale—Wechsler first developed an individual test in intelligence for adults. Followed by a similarly structured test for school-age children to age 16, and finally, a test for pre-school-age children.

These tests were influenced by Wechsler's belief that there is a total or global level of intellectual capacity that can be measured—thus; these tests yield a score that represents the person's overall intelligence. The tests developed by Wechsler also reflect the geographic metaphor of intelligence described by Sternberg (1990). Wechsler's tests more than any others have shaped psychologist's perception of intellectual functioning as comprised of separate but related verbal and performance (non-verbal abilities).

Wechsler (1939) emphasized that an IQ test measures **functional intelligence**, not intelligence itself. Functional intelligence is influenced by nonintellectual factors including motivation, configuration of specific abilities, and emotional adjustment. According to Wechsler score on an IQ test is a reflection of what one has learned, and which is a function of the opportunities to which one has been exposed and one's ability to take advantage of those opportunities. The subsets on Wechsler's test represent samples of behavior but they are not exhaustive.

The need for continued adaptation of intelligence testing is represented in the history of the Wechsler scales, because all three versions have undergone substantial revisions since their inception and even after Wechsler's death. These changes have taken two forms: changes in the items of the tests to make them more current and appropriate for new generations, and the testing of new normative samples to provide up-to-date sources for normative comparison in generating scores.

CONCLUSION

There is little question that intelligence tests have been misused at times in ways that have penalized minorities. There is also little doubt that some tests have contained certain items that have adversely affected the performance of some minorities. We should, therefore, do everything we can to develop better tests and to administer and interpret them in a sensitive fashion. However, banning tests seems an inappropriate cure that may ultimately harm the very people who need help.

INTELLIGENCE TESTS

DEFINITION

“Intelligence tests are psychological tests that are designed to measure a variety of mental functions, such as reasoning, comprehension, and judgment”.

PURPOSE

The goal of intelligence tests is to obtain an idea of the person's intellectual potential. The tests center around a set of stimuli designed to yield a score based on the test maker's model of what makes up intelligence. Intelligence tests are often given as a part of a battery of tests.

PRECAUTIONS WITH INTELLIGENCE TESTS

There are many different types of intelligence tests and they all do not measure the same abilities. Although the tests often have aspects that are related with each other, one should not expect that scores from one intelligence test, that measures a single factor, will be similar to scores on another intelligence test that measures a variety of factors.

Also, when determining whether or not to use an intelligence test, a person should make sure that the test has been adequately developed and has solid research to show its reliability and validity.

Additionally, psychometric testing requires a clinically trained examiner. Therefore, the test should only be administered and interpreted by a trained professional. This is especially true in case of different tests that measure different abilities in individuals. A person who is well trained in the administration of one test may or may not be as well trained in the administration of another test.

CRITICISM OF INTELLIGENCE TESTS

A central criticism of intelligence tests is that psychologists and educators use these tests to distribute the limited resources of our society. These test results are used to provide rewards such as special classes for gifted students, admission to college, and employment.

Those who do not qualify for these resources based on intelligence test scores may feel angry as if the tests are denying them opportunities for success. Unfortunately, intelligence test scores have not only become associated with a person's ability to perform certain tasks, but with self-worth.

Many people are under the false assumption that intelligence tests measure a person's inborn or biological intelligence. Intelligence tests are based on an individual's interaction with the environment and never exclusively measure inborn intelligence.

Intelligence tests have been associated with categorizing and stereotyping people. Additionally, knowledge of one's performance on an intelligence test may affect a person's aspirations and motivation to obtain goals. Intelligence tests can be culturally biased against certain groups.

COMMON PROCEDURES

When taking an intelligence test, a person can expect to do a variety of tasks.

These tasks may include having to answer questions that are asked verbally, doing mathematical problems, and doing a variety of tasks that require eye-hand coordination. Some tasks may be timed and require the person to work as quickly as possible.

Typically, most questions and tasks start out easy and progressively get more difficult. It is unusual for anyone to know the answer to all of the questions or be able to complete all of the tasks. If a person is unsure of an answer, guessing is usually allowed.

The person's raw scores on an intelligence test are typically converted to standard scores. The standard scores allow the examiner to compare the individual's score to other people who have taken the test. Additionally, by converting raw scores to standard scores the examiner has uniform scores and can more easily compare an individual's performance on one test with the individual's performance on another test.

Depending on the intelligence test that is used, a variety of scores can be obtained. Most intelligence tests generate an overall intelligence quotient or IQ. As previously noted, it is valuable to know how a person performs on the various tasks that make up the test. This can influence the interpretation of the test and what the IQ means. The average of score for most intelligence tests is 100.

ADVANTAGES

In general, intelligence tests measure a wide variety of human behaviors better than any other measure that has been developed.

They allow professionals to have a uniform way of comparing a person's performance with that of other people who are similar in age. These tests also provide information on cultural and biological differences among people.

Intelligence tests are excellent predictors of academic achievement and provide an outline of a person's mental strengths and weaknesses. Many times the scores have revealed talents in many people, which have led to an improvement in their educational opportunities. Teachers, parents, and psychologists are able to devise individual curricula that match a person's level of development and expectations.

DISADVANTAGES

Some researchers argue that intelligence tests have serious shortcomings. For example, many intelligence tests produce a single intelligence score. This single score is often inadequate in explaining the multidimensional aspects of intelligence.

Another problem with a single score is the fact that individuals with similar intelligence test scores can vary greatly in their expression of these talents. It is important to know the person's performance on the various subtests that make up the overall intelligence test score. Knowing the performance on these various scales can influence the understanding of a person's abilities and how these abilities are expressed.

For example, two people have identical scores on intelligence tests. Although both people have the same test score, one person may have obtained the score because of strong verbal skills while the other may have obtained the score because of strong skills in perceiving and organizing various tasks.

Furthermore, intelligence tests only measure a sample of behaviors or situations in which intelligent behavior is revealed. For instance, some intelligence tests do not measure a person's everyday functioning, social knowledge, mechanical skills, and/or creativity.

Along with this, the formats of many intelligence tests do not capture the complexity and immediacy of real-life situations. Therefore, intelligence tests have been criticized for their limited ability to predict non-test or nonacademic intellectual abilities. Since intelligence test scores can be influenced by a variety of different experiences and behaviors, they should not be considered a perfect indicator of a person's intellectual potential.

COMMONLY USED INTELLIGENCE TESTS

The three most commonly used intelligence tests are:

Stanford-Binet Intelligence Scales

Wechsler-Adult Intelligence Scale

Wechsler Intelligence Scale for Children

CONCEPTS OF IQ & DEVIATION IQ

Before we go into the details of the three tests, let us first understand the two basic concepts that are employed in the tests. These are the **concepts of IQ & Deviation IQ**

THE INTELLIGENCE QUOTIENT (IQ or RATIO IQ)

Binet regarded the mental age (MA) as an index of mental performance. Each item successfully passed on a Binet test signified a certain number of months' credit. At the conclusion of the test, the items passed were added up and the MA emerged. Thus, there was nothing magical about an MA: all it meant was the X numbers of items has been passed.

Subsequently, Stern (1938) developed the concept of intelligence quotient (IQ) to circumvent several problems that had arisen in using the difference between the chronological age (CA) and the MA to express deviance. At first glance, two children, one with an MA of 4 years and a CA of 5 years and another with an MA of 14 years and a CA of 15 years, would seem to be equally deficient. However, this is not the case, because intellectual growth is much more rapid at younger age levels. Therefore, even though there is only a one-year discrepancy between the MA and the CA of both children, the younger child is actually more deviant than the older one. The IQ notion enables us to perform the following computation:

$$IQ = MA/CA \times 100$$

As a result, we find that our 15-year-old has an IQ of 93, whereas the 5-year-old has an IQ of 80. These differing scores better reflect the reality of more rapid intellectual growth at younger ages.

It should be noted that in measuring intelligence, we cannot be sure that we are dealing with equal-interval measurement. We cannot be sure that an IQ of 50 is really twice as much as an IQ of 25 or that our scale has an absolute zero point. We cannot add and subtract IQs. All we can do is state that a person with an IQ of 50 is brighter than a person with an IQ of 25. All of this should serve to remind us that IQs and MAs are merely scores.

DEVIATION IQ: Although initially appealing, the ratio IQ is significantly limited in its application to older age groups. The reason is that a consistent (even if very high) mental age (MA) score accompanied by an increasing chronological age (CA) score will result in a lower IQ. Thus, it may appear that IQ has decreased over time when, in fact, one's intellectual ability has been maintained.

To deal with this problem, Wechsler introduced the concept of *deviation IQ*. The assumption is made that intelligence is normally distributed throughout the population. A deviation IQ then involves a comparison of an individual's performance on an IQ test with that of his or her age peers. Thus, the same IQ score has a similar meaning, even if two individuals are markedly different in age (for example, a 22-year-old versus an 80-year-old). In both cases, an IQ of 100 indicates an average level of intellectual ability for that age group.

THE CLINICAL ASSESSMENT OF INTELLIGENCE

In this section, we will briefly describe several of the most frequently used intelligence tests for children and adults.

THE STANFORD-BINET SCALE

The Stanford-Binet Intelligence Scale: Fourth Edition (SB: FE) is a standardized test that measures intelligence and cognitive abilities in children and adults, from age two through mature adulthood.

The Stanford-Binet Intelligence Scale has a rich history.

It is a descendant of the **Binet-Simon scale** which was developed in 1905 and became the first intelligence test.

The **Stanford-Binet Intelligence Scale** was developed in 1916 and was revised in 1937, 1960, and 1986. The present edition was published in 1986, and is called the *Stanford-Binet Fourth Edition*, or **SB-4**.

PURPOSE

The Stanford-Binet Intelligence Scale was originally developed to help place children in appropriate educational settings. It can help determine the level of intellectual and cognitive functioning in preschoolers, children, adolescents and adults, and assist in the diagnosis of a learning disability, developmental delay, mental retardation, or giftedness.

It is used to provide educational planning and placement, neuropsychological assessment, and research. The Stanford-Binet Intelligence Scale is generally administered in a school or clinical setting.

DESCRIPTION

The Stanford-Binet Intelligence Scale is comprised of four cognitive area scores which together determine the composite score and factor scores. The test consists of 15 subtests, which are grouped into the four area scores.

These area scores include: **Verbal Reasoning**, **Abstract/Visual Reasoning**, **Quantitative Reasoning**, and **Short-Term Memory**.

The composite score is considered to be what the authors call the best estimate of "g" or "general reasoning ability" and is the sum of all of subtest scores. General reasoning ability or "g" is considered to represent a person's ability to solve novel problems. The composite score is a global estimate of a person's intellectual functioning.

The following is a review of the specific cognitive abilities that the four area scores measure.

1. The Verbal Reasoning area score measures verbal knowledge and understanding obtained from the school and home learning environment and reflects the ability to apply verbal skills to new situations. Examples of subtests comprising this factor measure skills which include: word knowledge, social judgment and awareness, ability to isolate the inappropriate feature in visual material and social intelligence, and the ability to differentiate essential from non-essential detail.

2. The Abstract/Visual Reasoning area score examines the ability to interpret and perform mathematic operations, the ability to visualize patterns, visual/motor skills, and problem-solving skills through the use of reasoning. An example of a subtest which determines the Abstract/Visual Reasoning score is a

timed test that involves tasks such as completing a basic puzzle and replicating black and white cube designs.

3. The Quantitative Reasoning area score measures: numerical reasoning, concentration, and knowledge and application of numerical concepts. The Quantitative Reasoning area is combined with the Abstract/Visual Reasoning area score to create an Abstract/Visual Reasoning Factor Score.

4. The Short-Term Memory score measures concentration skills, short-term memory, and sequencing skills. Subtests comprising this area score measure visual short-term memory and auditory short term memory involving both sentences and number sequences. In one subtest that measures visual short-term memory, the participant is presented with pictures of a bead design, and asked to replicate it from memory.

Each subtest is composed of items at varying levels of difficulty, from age 2 to adulthood. SB-4 uses an adaptive testing procedure called *multistage testing*.

The examiner first gives the Vocabulary Test to determine the entry point (that is, which item to start with) for each remaining subtest. This initial estimate of ability provides a more appropriate entry or starting point on subsequent subtests, and is likely to result in more efficient testing, than relying exclusively on chronological age as a guide for a starting point. Thus, not all examinees of the same age are given the same items.

THE WECHSLER SCALES

David Wechsler used a deviation IQ concept. This approach, as we have seen, assumes that intelligence is normally distributed and compares individuals with their age peers. In effect, it compares the performance of a 15-year-old with that of other 15-year-olds. This method statistically establishes an IQ of 100 as the mean for each age group. As a result, an IQ of 100 means the same thing for any person, regardless of the person's age.

BACKGROUND OF WAIS

Earlier versions of the Stanford-Binet had a number of disadvantages that led David Wechsler in 1939 to develop the Wechsler-Bellevue Intelligence Scale. This was a test designed for adults – one that would offer items whose content was more appropriate for and more motivating to adults than the school-oriented Binet.

In contrast to the Stanford-Binet, whose items were arranged in age levels, the Wechsler-Bellevue Intelligence Scale grouped its items into subtests. For example, all arithmetic items were put into one subtest and arranged in order of increasing difficulty. In addition, there was a Performance Scale and a Verbal Scale (consisting of five and six subtests, respectively). A separate IQ for each scale could be calculated, along with a Full Scale IQ. The systematic inclusion of performance items helped remedy the overemphasis on verbal skills that limited the utility of the earlier Stanford-Binet with special populations

THE WAIS-III

DESCRIPTION

A new version of the Wechsler Bellevue, known as the Wechsler Adult Intelligent Scale (WAIS), first appeared in 1955. A revised edition (WAIS-R) was published in 1981. The most recent version, *the Wechsler Adult Intelligent Scale-Third Edition* (WAIS-III), was introduced in 1997. It is an individually administered measure of intelligence, intended for adults aged 16–89.

PURPOSE

The WAIS-III is intended to measure human intelligence reflected in both verbal and performance abilities. Besides being utilized as an intelligence assessment, the WAIS-III is used in neuropsychological evaluation, specifically with regard to **brain** dysfunction. Large differences in verbal and nonverbal intelligence may indicate specific types of brain damage.

The WAIS-III is also administered for diagnostic purposes. Intelligence quotient (IQ) scores reported by the WAIS-III can be used as part of the diagnostic criteria for **mental retardation**, specific learning disabilities, and **attention-deficit/hyperactivity disorder (ADHD)**.

The WAIS elicits three intelligence quotient scores, based on an average of 100, as well as subtest and index scores. WAIS subtests measure specific verbal abilities and specific performance abilities. The WAIS elicits an overall intelligence quotient, called the **full-scale IQ**, as well as a **verbal IQ** and a **performance IQ**. The three IQ scores are standardized in such a way that the scores have a mean of 100 and a standard deviation of 15.

The WAIS also elicits four indices, each based on a different set of subtests: **verbal comprehension**, **perceptual organization**, **working memory**, and **processing speed**.

The verbal and performance IQ scores are based on scores on the 14 subtests. The full-scale IQ is based on scores on all of the subtests and is a reflection of both verbal IQ and performance IQ. It is considered the single most reliable and valid score elicited by the WAIS. However, when an examinee's verbal and performance IQ scores differ significantly, the full-scale IQ should be interpreted cautiously.

Following are 14 WAIS-III subtests. Seven are the verbal subsets and 7 are the performance tests:

THE VERBAL IQ is derived from scores on seven of the subtests: **information**, **digit span**, **vocabulary**, **arithmetic**, **comprehension**, **similarities**, and **letter-number sequencing**. Letter-number sequencing is a new subtest added to the most recent edition of the WAIS (WAIS-III).

The **information** subtest is a test of general knowledge, including questions about geography and literature. The **digit span** subtest requires test takers to repeat strings of digits. The **vocabulary** and **arithmetic** subtests are general measures of a person's vocabulary and arithmetic skills. The **comprehension** subtest requires test takers to solve practical problems and explain the meaning of proverbs. The **similarities** subtest requires test takers to indicate the similarities between pairs of things. The **letter-number sequencing** subtest involves ordering numbers and letters presented in an unordered sequence. Scores on the verbal subtests are based primarily on correct answers.

THE PERFORMANCE IQ is derived from scores on the remaining seven subtests: **picture completion**, **picture arrangement**, **block design**, **object assembly**, **digit symbol**, **matrix reasoning**, and **symbol search**. Matrix reasoning and symbol search are new subtests and were added to the most recent edition of the WAIS (WAIS-III).

In the **picture completion** subtest, the test taker is required to complete pictures with missing elements. The **picture arrangement** subtest entails arranging pictures in order to tell a story. The **block design** subtest requires test takers to use blocks to make specific designs. The **object assembly** subtest requires people to assemble pieces in such a way that a whole object is built. In the **digit symbol** subtest, digits and symbols are presented as pairs and test takers then must pair additional digits and symbols. The **matrix reasoning** subtest requires test takers to identify geometric shapes. The **symbol search** subtest requires examinees to match symbols appearing in different groups. Scores on the performance subtests are based on both response speed and correct answers.

VERBAL SUBTESTS

Vocabulary
 Similarities
 Arithmetic
 Digit Span
 Information
 Comprehension
 Letter-Number Sequencing

PERFORMANCE SUBTESTS

Picture completion
 Digital Symbol-Coding
 Block Design
 Picture Arrangement
 Matrix Reasoning
 Symbol Search
 Object Assembly

PRECAUTIONS

The WAIS III is not considered adequate measure of extremely high and low intelligence (IQ scores below 40 and above 160). The nature of the scoring process does not allow for scores outside of this range for test takers at particular ages. Wechsler himself was even more conservative, stressing that his scales were not appropriate for people with an IQ below 70 or above 130. Also, when administering the WAIS to people at extreme ends of the age range (below 20 years of age or above 70), caution should be used when interpreting scores.

The age range for the WAIS III overlaps with that of the **Wechsler Intelligence Scale for Children (WISC)** for people between 16 and 17 years of age, and it is suggested that the WISC provides a better measure for this age range.

Administration and scoring of the WAIS require an active test administrator who must interact with the test taker and must know test protocol and specifications. WAIS administrators must receive proper training and be aware of all test guidelines.

THE WISC-III

The Wechsler Intelligence Scale for Children (WISC) was first developed in 1949 and revised in 1974 (WISC-R) The latest version, the *Wechsler Intelligence Scale for Children-Third Edition WISC-III*, was published in 1991.

It is an individually administered measure of intelligence intended for children aged six years to 16 years and 11 months.

PURPOSES

The WISC is designed to measure human intelligence as reflected in both verbal and nonverbal (performance) abilities. The WISC is used in schools as part of placement evaluations for programs for gifted children and for children who are developmentally disabled.

In addition to its uses in intelligence assessment, the WISC is used in neuropsychological evaluation, specifically with regard to **brain** dysfunction. Large differences in verbal and nonverbal intelligence may indicate specific types of brain damage.

The WISC is also used for other diagnostic purposes. IQ scores reported by the WISC can be used as part of the diagnostic criteria for **mental retardation** and specific learning disabilities. The test may also serve to better evaluate children with **attention-deficit/hyperactivity disorder (ADHD)** and other behavior disorders.

WISC III scores yield an overall intelligence quotient, called the **full scale IQ**, as well as a **verbal IQ** and a **performance IQ**. The three IQ scores are standardized in such a way that a score of 100 is considered average and serves as a benchmark for higher and lower scores. Verbal and performance IQ scores are based on scores on the 13 subtests.

The full scale IQ is derived from the child's scores on all of the subtests. It reflects both verbal IQ and performance IQ and is considered the single most reliable and valid score obtained by the WISC. When a child's verbal and performance IQ scores are far apart, however, the full scale IQ should be interpreted cautiously.

VERBAL IQ

The child's verbal IQ score is derived from scores on six of the subtests: **information**, **digit span**, **vocabulary**, **arithmetic**, **comprehension**, and **similarities**.

The **information** subtest is a test of general knowledge, including questions about geography and literature. The **digit span** subtest requires the child to repeat strings of digits recited by the examiner. The **vocabulary** and **arithmetic** subtests are general measures of the child's vocabulary and arithmetic skills. The **comprehension** subtest asks the child to solve practical problems and explain the meaning of simple proverbs. The **similarities** subtest asks the child to describe the similarities between pairs of items, for example that apples and oranges are both fruits.

PERFORMANCE IQ

The child's performance IQ is derived from scores on the remaining seven subtests: **picture completion**, **picture arrangement**, **block design**, **object assembly**, **coding**, **mazes**, and **symbol search**.

In the **picture completion** subtest, the child is asked to complete pictures with missing elements. The **picture arrangement** subtest entails arranging pictures in order to tell a story. The **block design** subtest requires the child to use blocks to make specific designs. The **object assembly** subtest asks the child to put together pieces in such a way as to construct an entire object. In the **coding** subtest, the child makes pairs from a series of shapes or numbers. The **mazes** subtest asks the child to solve maze puzzles of increasing difficulty. The **symbol search** subtest requires the child to match symbols that appear in different groups. Scores on the performance subtests are based on both the speed of response and the number of correct answers.

CONCLUSION

THE CLINICAL USE OF INTELLIGENCE TESTS

It is time to take a closer look at how these tests are used in the clinical setting.

THE ESTIMATION OF GENERAL INTELLECTUAL LEVEL

The most obvious use of an intelligence test is as a means for arriving at an estimate of the patient's general intellectual level. Often the goal is the determination of how much general intelligence “g” a given person possesses.

Often, the question is stated a bit differently, for example, what is the patient's intellectual potential? Posing the question in this way suggests that perhaps the person is not functioning as well as his or her potential would indicate. The potential can form a baseline against which to measure current achievements, thus providing information about the patient's current level of functioning.

PREDICTION OF ACADEMIC SUCCESS

There are data that demonstrate a relationship between intelligence test scores and school success. To the extent that intelligence should logically reflect the capacity to do well in school, we are justified in expecting intelligence tests to predict school success. Not everyone would equate intelligence with scholastic aptitude, but the fact remains that a major function of intelligence tests is to predict school

performance. One must remember, however, that intelligence and academic success are not conceptually identical.

THE APPRAISAL OF STYLE

The clinical psychologists' interest is not only in the client's success or failure on particular test items but also how that success or failure occurs. One of the major values of individual intelligence tests is that they permit us to observe the client or patient at work. Such observations can help us greatly in interpreting an IQ. For example, did this child do as well as possible? Was there failure-avoidance? Did the child struggle with most items, or was there easy success? Was the child unmotivated, and could this have detracted from the child's performance? Such questions and the ensuing interpretations breathe life into an otherwise inert IQ score.

THE USE AND ABUSE OF PSYCHOLOGICAL TESTING

Ours has long been a test-oriented society. Whether the question concerns personnel selection, intellectual assessment, or measuring the "real me," many people turn to tests. Some consult popular magazines (and now the Internet!) for these tests, others consult skilled clinicians but the abiding curiosity and the inflated set of expectations about tests seem constant. And quite often, such high expectations lead to abuse.

Testing is big business. Psychological, educational, and personnel corporations sell many thousands of tests each year. So many of our lives are touched in so many ways by assessment procedures that we have become accustomed to them and hardly notice them. Admission to college, employment, and discharge from military service, imprisonment, adoption, therapeutic planning, computer dating, and special classes all may depend on test performance. Any enterprise that becomes so large and affects such large numbers of people invites careful scrutiny.

Protection: The APA's (1992) ethical standards require that psychologists use only techniques or procedures that lie within their competence. These ethical standards, the growth of state certification and licensing boards, and the certification of professional competence offered by the American Board of Professional Psychology all combine to increase the probability that the public's interests will be protected.

In addition, the purchase of testing materials is generally restricted by the publisher to individuals or institutions that can demonstrate their competence in administering, scoring, and interpreting tests. In effect, then, the sale of tests is not open but is dependent upon the user's qualifications. However, neither professional guidelines nor publishers' restrictions are totally successful. Tests still sometimes find their way into the hands of unscrupulous individuals. Ethical standards are not always sufficient either.

The marketers for each test bear some responsibility as well. Normative data and instructions for administration and scoring should be included in *every* test manual. All in all, enough data should be included to enable the user to evaluate the reliability and validity of the test.

The Question of Privacy: Most people assume that they have the right to reveal as little or as much as they like about their attitudes, feelings, fears, or aspirations. Of course, with subtle or indirect assessment procedures, an examinee cannot always judge with complete certainty whether a given response is desirable. But whatever the nature of a test, the individual has the right to a full explanation of its purposes and of the use to which the results will be put.

The examinee must be given only tests relevant to the purposes of the evaluation. If an MMP1-2 or a Rorschach is included in a personnel-selection battery, it is the psychologist's responsibility to explain the relevance of the test to the individual. Informed consent to the entire assessment process should be obtained, and individuals should be fully informed of their options. This applies even to those who have initiated the contact (as by voluntarily seeking clinical services).

The Question Of Confidentiality: Issues of trust and confidentiality loom large in our society. The proliferation of computer processing facilities and huge data banks makes it very easy for one government agency to gain access to personal records that are in the files of another agency or a company. Credit card agencies, the FBI, the CIA, the IRS, and other organizations create a climate in which no one's records or past seem to be confidential or inviolable. Although information revealed to psychiatrists and clinical psychologists is typically regarded as privileged, there are continuing assaults on the right to withhold such information. For example, the Tarasoff decision of the California Supreme

Court makes it clear that information provided by a patient in the course of therapy cannot remain privileged if that information indicates that the patient may be dangerous. If the "sanctity" of the therapy room is less than unassailable, it is certain that personnel records, school records, and other test repositories are even more vulnerable. Clinical psychologists employed in industrial settings are also unable to ensure absolutely the privacy of test results. Clinicians can become caught in the middle of tugs of war between union and management over grievance claims. It sometimes happens also that when people are treated under insurance or medical assistance programs, their diagnoses are entered into computer records to which many companies may obtain access.

When an individual is tested, every effort should be made to explain the purposes of the testing, the use to which the results will be put, and the people or institutions that will have access to the results. If the individual gives informed consent, the testing can proceed. However, if it subsequently becomes desirable to release the results to someone else, the individual's consent must be obtained. It is clear that not all clients wish to have their mental health records released, and even when they sign consent forms, they often seem to do so either out of a fear that they will be denied services or out of sheer obedience to authority'.

The Question of Discrimination: Since the rise of the civil rights movement, most people have become increasingly aware of the ways in which society has both knowingly and unknowingly discriminated against minorities. Within psychology, attacks have recently centered on the ways in which tests discriminate against minorities. For example, the original standardization of the Stanford-Binet contained no African American samples. Since then, many tests have been published whose attempts to include racially unbiased samples have been questioned. It is often charged that most psychological tests are really designed for white middle-class populations and that other groups are handicapped by being tested with devices that are inappropriate for them.

Sometimes the minority group member's lack of exposure to tests and test situations may be a major source of the problem. Such inexperience, inadequate motivation, and discomfort in the presence of an examiner from another race all may affect test performance. Often, too, test materials are prepared or embedded in a racially unfair context. For example, the TAT cards may all depict white characters, or the items on an intelligence test may not be especially familiar to an African American child. The problem here is the test items themselves, the manner in which they are presented, or the circumstances surrounding a test may work to the disadvantage of the minority individual.

Test Bias: It is important to remember that significant differences between mean scores on a test for different groups do not in and of themselves indicate test bias or discrimination. Rather, test bias or discrimination is a *validity* issue. That is, if it can be demonstrated that the validity of a test (in predicting criterion characteristics or performance, for example) varies significantly across groups, then a case can be made that the test is "biased" for that purpose. In other words, a test is biased to the extent that it predicts more accurately for one group than for another group.

An example can illustrate these considerations. Let us assume that one of the authors developed a personality inventory measuring the trait "hostility." As part of the standardization project for this test, the author discovered that men scored significantly higher than women on this test. Does this indicate that the test is biased? Not necessarily. The author found, in a series of validity studies, that the relationship (correlation) between hostility inventory scores and the number of *verbal* fights over the succeeding two months was quite similar for both men and women. In other words, the predictive validity coefficients for the two groups were comparable; similar hostility scores "meant" the same thing (predicted a comparable number of verbal fights) for men and women. On the other hand, it is quite possible that the strength of the correlation between hostility scores and *physical* fights over the next two months is significantly greater for men than for women. In this case, the use of the test to predict physical aggression in women would be biased if these predictions were based on the known association between hostility scores and physical fights found in men.

Several general points should be clear. First, differences in mean scores do not necessarily indicate test bias. In the previous example, there may be good reasons why men score higher on average than women on a measure of hostility (for example, hormonal differences or other biological factors may lead to higher levels of hostility for men). In fact, to find no difference in men scores might call into question the validity of the test in this case. Second, the pronouncement of a test as "valid," although frequently seen in the clinical psychology literature, is in-correct. Tests may be valid (and not biased) for some purposes but not for others. Finally, one can "overcome" test bias by using different (and more appropriate) prediction equations for the different groups. In other words, bias comes into play when the clinical psychologist makes predictions based on empirical associations that are characteristic of another group (such as men) but not of the group of interest (such as I women). The goal is to investigate the possibility differential validity and, if found, to use the appropriate prediction equation for that group.

Computer Based Assessment: Computers have been used for years to score tests and to generate psychological profiles. Now they are also used to administer and interpret responses to clinical interviews, IQ Tests, self-report inventories, and even projective tests. The reasons given for using computers include cutting costs, enhancing clients' attention and motivation, and standardizing procedures across clinicians. Clearly computers have great potential, but they also contain the seeds of definite problems. To begin with, there needs to be greater acceptance of computers by professionals. Beyond that, more attention must be devoted to the feelings and reactions of clients upon whom these procedures are imposed. Important issues of reliability and validity as well as proper feedback to clients, have yet to be settled. Finally, the field needs better overall professional standards for such testing. It is important to remember that computer systems can easily be misused, either by those who are poorly trained or by those who endow computers with a sagacity that transcends the quality and utility of the information programmed into them.

Numerous efforts have been made to computerize the scoring and interpretation of the MMPI in particular .The approaches are mainly descriptive and most often useful for screening. But programs exist to generate highly interpretive statements as well). However, not everyone believes that computerized and conventional usages of the MMPI yield comparable results.

PERSONALITY

When we assume that people will display continuity in their behavior and emotional style over time, we are making assumptions about the continuity of their **personality**. When the psychologists use the word personality they are referring to the observation that people display a certain degree of consistency and structure in the ways that they experience and interact with the world. There are two aspects of this consistency: stability across different situations and consistency over time within similar circumstances or situations. Personality theories are concerned with stable enduring characteristics of people, or what they refer to as **traits** consistent ways of perceiving the self, the world, and other people; consistent ways of experiencing and managing one's emotions; and consistent ways of behaving. These basic consistencies in behavior, thoughts, and feelings may be due to genetic factors, or they may be learned, ingrained patterns of behavior or they may be both.

ASSESSMENT OF PERSONALITY

According to Ozer and Reise (1994),

‘personality assessment ,as a scientific endeavor, seeks to determine those characteristics that constitute important individual differences in personality, to develop accurate measures of such attributes and to explore fully the consequential meanings of these identified and measured characteristics.’

Personality tests can be grouped according to the methods that they use to obtain data. The broadest distinction is between what are termed objective personality tests and projective personality tests.

Objective Personality Tests: - The objective approach to personality assessment is characterized by the reliance on structured, standardized measurement Devices, which are typically of a self-report nature. “Structured” reflects the tendency to use straight-forward test stimuli, such as direct questions regarding the person’s opinion of themselves, and unambiguous instructions regarding the completion of the test. Many objective tests use a [true/false or yes/no response format; others pro-; vide a dimensional scale (for example, 0 = strong \ disagree; 1 = disagree; 2 = neutral; 3 = agree; 4 = [strongly agree). Objective tests have both advantages and disadvantages, discussed below.

Some Advantages

1. First of all, they are economical. After only brief instructions, large groups can be tested simultaneously, or a single patient can complete an inventory alone. Even computer. Scoring and interpretation of these tests are possible.
2. Second, scoring and administration are relatively simple and objective. This, in turn, tends to make interpretation easier and seems to require less interpretive skill on the part of the clinician.
3. Often a simple score along a single dimension (such as adjustment-maladjustment) or on a single trait (such as dependency or psychopathy) is possible.
4. A final attraction of self-report inventories, particularly for clinicians who are disenchanted with the problems inherent in projective tests, is their apparent objectivity and reliability.

Some Disadvantages

1. The items of many inventories are often behavioral in nature. That is, the questions or statements concern behaviors that may (or may not) characterize the respondent. For example, although two individuals may endorse the same behavioral item ("I have trouble getting to sleep"), they may do so "for entirely different reasons.
2. Some inventories contain a mixture of items dealing with behaviors, cognitions, and needs. Yet inventories often provide single, overall score—which may reflect various combinations of these behaviors, cognitions, and needs
3. Other difficulties involve the transparent meaning of some inventories' questions, which can obviously facilitate faking on the part of some patients.
4. In addition, the forced-choice approach prevents individuals from qualifying or elaborating their responses so that some additional information may be lost or distorted.
5. In other instances, the limited understanding or even the limited reading ability ' of some individuals may lead them to misinterpret questions

Methods of the Test Construction for Objective Tests: Over the years, a variety of strategies for constructing self-report inventories have been proposed.

Content Validation: The most straightforward approach to measurement is for clinicians to decide what it is they wish to assess and then to simply ask the patient for that information.

Ensuring content validity, however, involves much more than simply deciding what you want to assess and then making up some items that appear to do the job. Rather, more sophisticated *content validation* methods involve 1) carefully defining ail relevant aspects of the variable you are attempting to measure; (2) consulting experts before generating items; (3) using judges to assess each potential item's

relevance to the variable of interest: and (4) using psychometric analyses to evaluate each item before you include it in your measure

However several potential problems are inherent in the content validity approach to test construction. First, can clinicians assume that every patient interprets a given item in exactly the same way? Second, can patients accurately report their own behavior or emotions? Third, will patients be honest, or will they attempt to place themselves in a good light (or even a bad light at times)? Fourth, can clinicians assume that the "experts" can be counted on to define the essence of the concept they are trying to measure? Most of these seem to be general problems for the majority of inventories, regardless of whether they depend on content sampling to establish their validity.

Empirical Criterion Keying: In an attempt to help remedy the foregoing difficulties, the *empirical criterion keying* approach was developed. In this approach, no assumptions are made as to whether a patient is telling the truth or the response really corresponds to behavior or feelings. What is important is that certain patients describe themselves in certain ways.

The important assumption inherent in this approach is that members of a particular diagnostic group will tend to respond in the same way. Consequently, it is not necessary to select test items in a rational, theoretical fashion. All that is required is to show on an empirical basis that the members of a given diagnostic group respond to a given item in a similar fashion.

Factor Analysis: These days, the majority of test developers use a factor analytic (or internal consistency) approach to test construction. Here, the idea is to examine the inter-correlations among the individual items from many existing personality inventories. Succeeding factor analyses will then reduce or "purify" scales thought to reflect basic dimensions of personality. The **exploratory factor** analytic approach is atheoretical. One begins by capturing a universe of items and then proceeds to reduce them to basic elements—personality, adjustment, diagnostic affiliation, or whatever—hoping to arrive at the core traits and dimensions of personality. **Confirmatory factor analytic** approaches are more theory-driven, seeking to confirm a hypothesized factor structure (based on theoretical predictions) for the test items.

The strength of the factor analytic approach to test construction is the emphasis on an empirical demonstration that items purporting to measure a variable or dimension of personality are highly related to one another. However, a limitation of this approach is that it does not in and of itself demonstrate that these items are actually measuring the variable of interest; we only know that the items tend to be measuring the same "thing."

Construct Validity Approach: This approach combines many aspects of the content validity, empirical criterion keying, and factor analytic approaches (In this approach, scales are developed to measure specific concepts from a given theory. In the case of personality assessment, the intent is to develop measures anchored in a theory of personality. Validation is achieved when it can be said that a given scale measures the theoretical construct in question. The selection of items is based on the extent to which they reflect the theoretical construct under study. Item analysis, factor analysis, and other procedures are used to ensure that a homogeneous scale is developed. Construct validity for the scale is then determined by demonstrating, through a series of theory-based studies, that those who achieve certain scores on the scale behave in nontest situations in a fashion that could be predicted from their scale score. Because of its comprehensiveness, the *construct validity approach* to test construction is both the most desirable and the most labor intensive. In fact, establishing the construct validity of a test is a never-ending process, with empirical feedback used to refine both the theory and the personality measure.

THE MMPI AND THE MMPI-2

The MMPI is a self-report inventory that is the most widely used and most thoroughly researched of the objective personality assessment instruments. It was developed in 1937 by Starke Hathaway, a psychologist, and J. Charnely McKinley, a psychiatrist. This test was recently updated and is called the MMPI-2. This test consists of over 500 statements---such as “**I sometimes tease animals**”, “**I believe I am being plotted against**”----to which the subject must respond with “**true**”, “**false**” or “**cannot say**”. The test may be used in card or booklet forms.

The MMPI gives score on 10 standard scales, each of which was derived empirically. The items for each scale were selected for their ability to separate medical and psychiatric patients from normal controls.

Clinical Scales: the clinical scales are often referred by number e.g. 8(sc). The other is:

1. HYPOCHONDRIA (Hs)
2. DEPRESSION (D)
3. HYSTERIA (Hy)
4. PSYCHOPATHIC DEVIANCE (Pd)
5. MASCULINITY-FEMININITY (Mf)
6. PARANOIA (Pa)
7. PSYCHASTHENIA (Pt)
8. SCHIZOPHRENIA (Sc)
9. HYPOMANIA (Ma)
10. SOCIAL INTROVERSION (Si)

Validity Scales: To help detect malingering (“faking bad”), or other response sets or test-taking attitudes, and carelessness or misunderstanding, the MMPI-2 has four validity scales

1. **? (CANNOT SAY) Scale:** this is the number of items left unanswered.
2. **F (INFREQUENCY) Scale:** these 60 items were seldom answered in the scored direction by the standardization group. A high F score may suggest deviant response sets, markedly aberrant behavior.
3. **(LIE) Scale:** this includes 15 items whose endorsement places the respondent in a very positive light. In reality, however, it is unlikely that the items would be truthfully so endorsed. E.g. “I like everyone I meet”.
4. **K (DEFENSIVENESS) Scale:** these 30 items suggest defensive in admitting certain problems

Interpretation: _An accurate interpretation requires great experience with the test and some understanding of the social, educational, and socioeconomic background from which the patient comes. Recent evidence indicates that religion and race are both potential variables in MMPI responses.

Interpretation through Profile Analysis: interpretation has now shifted to an examination of patterns or “profiles” of scores. For example, individuals who produce elevations on the first three clinical scales (Hs, D, and Hy) tend to present with somatic complaints and depressive symptoms and often receive somatoform, anxiety or depressive disorder diagnosis.

Interpretation through Content: For the MMPI-2, a variety of content scales have been developed as well. E.g. certain items can help identify fears, health concerns, cynicism, and the type-A personality and so on. Such scales enable the clinician to move beyond simple diagnostic labels to a more dynamic level of interpretation.

MILLON CLINICAL MULTI-AXIAL INVENTORY (MCMI)

The MCMI is a 175 item, true-false, paper-pencil personality inventory that was developed by Theodore Millon and his co-workers in the late 1970's. The original test allowed for scoring and interpretation on 11 scales, which represented personality disorders from the DSM. The test also contained a brief validity scale and nine scales designed to assess reactive symptoms disorders, which the test authors claimed were of a less enduring nature than the personality scales.

Examples of some scales are:

- Avoidant personality
- Dependent personality
- Histrionic personality
- Narcissistic personality
- Hypo manic personality
- Compulsive personality
- Passive-aggressive personality
- Antisocial personality

The MCMI was revised in 1987, the new version is the MCMI-II, item Content was reevaluated for the MCMI-II and new validity scales were added. Normative data were enhanced by the addition of clinical samples and the MCMI-II is compatible with the revised DSM (IV).

THE REVISED NEO-PERSONALITY INVENTORY

Description: The NEO-PI-R is a self-report measure of personality developed by Costa & McCrae in 1992, and is also known the five-factor Model (FFM). As operationalized by the NEO-PI-R, the five factors or Domain are neuroticism, extraversion, and openness to experience, agreeableness, and conscientiousness. Each domain has six facets or subscales. The NEO-PI-R consists of 240 items (8 items for each of the 30 facet r 48 items for each of the 5 domains). Individuals rate each of the 240 Statements on a five-point scale.

DOMAINS AND FACETS OF PERSONALITY MEASURED BY THE NEO-PI-R

<i>Domain</i>	<i>Facets</i>
Neuroticism	Anxiety, Hostility, Depression, Self- Consciousness, Impulsiveness, Vulnerability
Extra version	Warmth, Gregariousness, Assertiveness, Activity, Excitement Seeking, Positive Emotions
Openness to Experience	Fantasy Aesthetics, Feelings, Actions, Ideas, Values
Agreeableness	Trust, Straightforwardness, Altruism, Compliance, Modesty, Tender-Mindedness
Conscientiousness	Competence, Order, Dutifulness, Achievement Striving, Self-Discipline, Deliberation

TYPE A- TYPE B BEHAVIOR

Two cardiologists, Meyer Friedman and Ray Rosenman, developed the Concept that a specific behavior pattern, type A seta into motion the Pathophysiology necessary for the production of coronary artery

disease They further hypothesized that the type A behavior pattern is a major Risk factor (along with cholesterol, hypertension, smoking and a positive Family history) for the disease.

According to Friedman, the most important aspects of the Type A behavior patterns are excesses of time urgency and competitive Hostility (psychomotor manifestations like rapid eye blinking, lip clicking During speaking, tense posture, speech hurrying, sucking in of air during Speech etc). Person designated as type B display obverse qualities of Behavior. They are relaxed, less aggressive, unhurried, and less apt to strive vigorously to achieve a goal than are type A persons. Although one Might expect type A person to be successful than type B. In fact, some Data indicate that type A are less successful than type B persons, despite The ardent desire of type A persons to achieve.

THE PROJECTIVE PERSONALITY TESTS

PROJECTIVE TESTS

Projective test represents the second broad approach to the assessment of personality, one that is radically different from the methods used in objective personality tests. The format, items, administration, and scoring of projective personality tests are all distinct from that of objective tests, whereas objective tests require responses to explicit verbal questions or statements, projective tests ask for responses to ambiguous and unstructured stimuli. Indeed, a major distinguishing feature of projective techniques is the use of a relatively unstructured task that permits an almost unlimited number of responses.

The development and use of virtually all projective personality tests are based on the projective personality tests are based on the **projective hypothesis**, i.e. projective techniques were essentially psychological **X-rays**. According to the projective hypothesis, when faced with ambiguous stimuli, respondents will project aspects of their personalities onto the stimuli in an effort to make sense of them. The examiner then can work backward from the persons' responses to gain insight into the personality dispositions.

THE NATURE OF PROJECTIVE TESTS

Projective techniques, taken as a whole, tend to have the following distinguishing characteristics.

1. In response to an unstructured or ambiguous stimulus, examinees are forced to impose their own structure and, in so doing, reveal something of themselves (such as needs, wishes, or conflicts).
2. The stimulus material is unstructured. This is a very tenuous criterion, even though it is widely assumed to reflect the essence of projective techniques. For example, if 70% of all examinees perceive Card V on the Rorschach as a bat, then we can hardly say that the stimulus is unstructured. Thus, whether a test is projective or not depends on the kinds of responses that the individual is encouraged to give and on how those responses are used. The instructions are the important element. If a patient is asked to classify the people in a set of TAT cards as men or women, then there is a great deal of structure—the test is far from ambiguous. However, if the patient is asked what the people on the card are saying, the task has suddenly become quite ambiguous indeed.
3. The method is indirect. To some degree or other, examinees are not aware of the purposes of the test; at least, the purposes are disguised. Although patients may know that the test has something to do with adjustment-maladjustment, they are not usually-aware in detail of the significance of their responses. There is no attempt to ask patients directly about their needs or troubles; the route is indirect, and the hope is that this very indirectness will make it more difficult for patients to censor the data they provide.
4. There is freedom of response. Whereas questionnaire methods may allow only for a "yes" or a "no," projective permit a nearly infinite range of responses.
5. Response interpretation deals with more variables. Since the range of possible responses is so broad, the clinician can make interpretations along multiple dimensions (needs, adjustment, diagnostic category, ego defenses, and so on). Many objective tests, in contrast, provide but a single score (such as degree of psychological distress), or scores on a fixed number of dimensions or scales.

MEASUREMENT AND STANDARDIZATION

The contrasts between objective tests and projective tests are striking. The former, by their very nature, lend themselves to an actuarial interpretive approach. Norms, reliability, and even validity seem easier

to manage. The projective, by their very nature, seem to resist psychometric evaluation. Indeed, some clinicians reject even the suggestion that a test such as the Rorschach should be subjected to the indignities of psychometrics; they would see this as an assault upon their intuitive art. In this section, we offer several general observations about the difficulties involved in evaluating the psychometric properties of projective tests.

Standardization: Should projective techniques be standardized? There are surely many reasons for doing so. Such standardization would facilitate communication and would also serve as a check against the biases and the interpretive zeal of some clinicians. Furthermore, the enthusiastic proponents of projective usually act as if they have norms (implicit though these may be), so that there seems to be no good reason *not* to attempt the standardization of those norms. Of course, research problems with projective can be formidable.

The dissenters argue that interpretations from projectives cannot be standardized. Every person is unique, and any normative descriptions will inevitably be misleading. There are so many interacting variables that standardized interpretive approaches would surely destroy the holistic nature of projective tests. After all, they say, interpretation is an art.

Reliability: Even the determination of reliability turns out not to be simple. For example, it is surely too much to expect an individual to produce, word for word, exactly the same TAT story on two different occasions. Yet how many differences between two stories are permissible? Of course, one can bypass test responses altogether and deal only with the reliability of the personality interpretations made by clinicians. However, this may confound the reliability of the test with the reliability of the judge. Also, test-retest reliability may be affected by psychological changes in the individual—particularly when dealing with patient populations. It is true that clinicians can opt for establishing reliability through the use of alternate forms. However, how do they decide that alternate forms for TAT cards or inkblots are equivalent? Even split-half reliability is difficult to ascertain because of the difficulty of demonstrating the equivalence of the two halves of each test.

Validity: Because projective have been used for such a multiplicity of purposes, there is little point in asking general questions: Is the TAT valid? Is the Rorschach a good personality test? The questions must be more specific: Does the TAT predict aggression in situation A? Does score [from the Rorschach correlate with clinical dents of anxiety?

With these issues in mind, we turn now to a discussion of several of the more popular projective tests.

THE RORSCHACH

The prototypic example of projective personality tests is the **Rorschach Inkblot Test**, developed by Swiss psychiatrist Herman Rorschach in 1921. indeed, the Rorschach Inkblot Test ‘has the dubious distinction of being, simultaneously, the most cherished and the most reviled of all psychological assessment instruments’.

Description: The Rorschach consists of ten cards on which are printed inkblots that are symmetrical from right to left. Five of the ten cards are black and white (with shades of gray), and the other five are colored.

Administration: There are various techniques for administering the Rorschach. However, for many clinicians, the process goes something like this. The clinician hands the patient the first card and says, "Tell me what you see—what it might be for you. There are no right or wrong answers. Just tell me what it looks like to you." All of the subsequent cards are administered in order. The clinician takes down verbatim everything the patient says. Some clinicians also record the length of time it takes the patient to make the first response to each card, as well as the total rime spent on each card. Some patients produce many responses per card, others very few. The clinician also notes the position of the

card as each response is given (right side up, upside down, or sideways). All spontaneous remarks or exclamations are also recorded. Following this phase, the clinician moves to what is called the Inquiry. Here the patient is reminded of all previous responses, one by one, and asked what it was that prompted each response. The patient is also asked to indicate for each card the exact location of the various responses. This is also a time when the patient may elaborate or clarify responses.

Scoring: The scoring of responses converts the important aspects of each response into a symbol system related to location areas, determinants, content areas, and popularity

Location: Location is scored in terms of which portion of the blot was used as a basis for a response (e.g. the whole blot, a common detail of the blot, an unusual detail of the blot, an area of white space). Attention to the whole blot with accurate form perception reflects good organizational ability and high intelligence. Over attention to detail is common in obsessive and paranoid subjects.

Determinants: the determinants of each response reflect the Features of the blot that made it look the way the patient thought it Looked (e.g. form, shading, colures, and movement of either humans or animals, inanimate movements). Overemphasis on form suggests rigidity and constriction of the personality. Color responses relate to the emotional reactions of the person to the environment and to the control of affect.

Interpretation: The Rorschach test is particularly useful as an aid in diagnosis. The subjects thinking and association patterns are brought clearly into focus because the ambiguity of the stimulus provides relatively few cues about what are conventional, standard, or normal Responses. Proper interpretation, however, requires a great deal of Experience. There is a high reliability among experienced clinicians who administer the test. In proper hands, the test is extremely useful, especially in eliciting psychodynamic formulations, defense mechanism, and subtle disorders of thinking.

Reliability and Validity: Research-oriented clinical psychologists have questioned the reliability of Rorschach scores for years, at the most basic level one should be confident that Rorschach responses can be scored reliably across raters. If the same Rorschach responses cannot be scored similarly by different raters using the same scoring system, then it is hard to imagine that the instrument would have much utility in clinical prediction situations. Unfortunately, the extent to which Rorschach scoring systems meet acceptable standards for this most basic and straightforward form of reliability remains contentious.

Interscorer reliability is important to address, we must evaluate the consistency of an individual's scores across time or test conditions, as well as the reliability of interpretations of scores.

As for validity of Rorschach scores and interpretations, there have been many testimonials the years, from the vast Rorschach literature, it is apparent that the test is not equally valid for all purposes. In a very real sense, the problem is not one of determining whether the Rorschach is valid, but of differentiating the conditions under which it is useful from those under which it is not. For many years, a procedure involving interpretation of a Rorschach with almost no other information about the patient was used to assess Rorschach validity

Utility of Rorschach: The debate over the utility of the Rorschach in clinical assessment continues. Rorschach is useful when the focus is on the unconscious functioning and problem-solving styles of individuals. However, critics remain skeptical of the clinical utility of Rorschach scores or their incremental validity.

Rorschach Inkblot "Method." Recently, Weiner (1994) has argued that the Rorschach is best conceptualized as a *method* of data collection, not a test. The Rorschach is not a test because it does not test anything. A test is intended to measure whether something is present or not and in what quantity. . . . But with the Rorschach, which has traditionally been classified as a test of personality, we do not measure whether people have a personality or how much personality they have.

Several implications follow. First, Weiner argues that data generated from the Rorschach method can be interpreted from a variety of theoretical positions. These data suggest how the respondent typically solves problems or makes decisions (cognitive structuring processes) as well as the meanings that are assigned to these perceptions (associational processes). Weiner calls this an "integrationist" view of the Rorschach, because the method provides data relevant to both the structure and dynamics of personality. According to Weiner, a second, practical implication is that viewing the Rorschach as a method allows one to fully use all aspects of the data that are generated, resulting in a more thorough diagnostic evaluation.

The influence and utility of this reconceptualization remains to be seen. In any case, empirical data supporting the utility and incremental validity of data generated by the Rorschach "method" are still necessary before its routine use in clinical settings can be advocated.

THEMATIC APPERCEPTION TEST

The Thematic Apperception Test (TAT) was introduced by Morgan and Murray in 1935. It purports to reveal patients' basic personality characteristics through the interpretation of their imaginative productions in response to a series of pictures. Although the test is designed to reveal central conflicts, attitudes, goals, and repressed material, it actually produces material that is a collage of these plus situational influences, cultural stereotypes, trivia, and so on.

Most clinicians use the TAT as a method of inferring psychological needs (achievement, affiliation, dependency, power, sex, and so on) and of disclosing how the patient interacts with the environment. TAT is used to infer the content of personality and the mode of social interactions. With a TAT, clinicians are likely to make specific judgments, such as "This patient is hostile toward authority figures, yet seeks their affection and approval." The TAT is less likely to be used to assess the degree of maladjustment than to reveal the locus of problems, the nature of needs, or the quality of interpersonal relationships.

Description: There are 31 TAT cards (one is a blank card); most depict people in a variety of situations, but a few contain only objects. Some are said to be useful for boys and men, some for girls and women, and some for both genders. Murray suggested that 20 of the 31 cards be selected for a given examinee. As a test, the TAT does not appear to be as ambiguous or unstructured as the Rorschach. However, though the figures in the pictures may clearly be people, it is not always clear what their gender is, exactly who they are, what they are doing, or what they are thinking.

Administration: In practice, clinicians typically select somewhere between 6 and 12 cards for administration to a given patient. Although the exact instructions used will vary from clinician to clinician, they go something like this: "Now, I want you to make up a story about each of these pictures. Tell me who the people are, what they are doing, what they are thinking or feeling, what led up to the scene, and how it will turn out. OK? The patient's productions are transcribed by the clinician. In some instances, patients may be asked to write out their stories, but this can result in shorter than normal stories.

Scoring: Several scoring systems have been developed for the TAT, for example, rate each story on several scoring categories, including unconscious structure and drives of the subject, relationship to the others, significant conflicts, defenses used, and ego strength. Another scoring system for TAT was designed to assess object relations, that is, respondent's mental representations of people, of other people. Four dimensions of object relations were assessed; complexity of representation of people, affect-tone of relationships, capacity for emotional investment in relationships and moral standards, and understanding.

Reliability and Validity: It is very difficult to evaluate the reliability and validity of the TAT in any formal sense. There are so many variations in instructions, methods of administration, number of cards used, and type of scoring scheme (if any) that hard conclusions are virtually impossible. The same

methodological issues arise when studying reliability. For example, personality changes may obscure any conclusions about test-retest reliability, or there may be uncertainty about equivalent forms when trying to assess alternate-forms reliability. It is possible to investigate theme reliability, but since one cannot expect word-for-word similarity from one occasion next, one is usually studying the reliability of judges' interpretations. When there is an explicit, theoretically derived set of scoring instructions interjudge agreement can reach acceptable proportions. Interjudge reliability can also be achieved when quantitative ratings are involved. But broad, global interpretations can present problems. Some attempts have been made to establish the validity of the TAT. Methods have included

- (1) Comparison of TAT interpretations with case data or with therapist evaluations of the patient;
- (2) Matching techniques and analyses of protocols with no additional knowledge about the patient;
- (3) Comparisons between clinical diagnoses derived from the TAT and psychiatrists' judgments; and
- (4) Establishment of the validity of certain general principles of interpretation (for example, the tendency of the person to identify with the hero of the story, or the probability that unusual themes are more significant than common ones).

The typical clinical use of the TAT suggests that it remains basically a subjective instrument. Although it is possible to identify general principles of interpretation, these can serve only as guides—not as exact prescriptions for interpretation. Adequate interpretation depends upon some knowledge of the patient's background. As the clinician examines the test protocol, attention must be paid to the frequency with which thematic elements occur, the unusualness of stories, the manner in which plots are developed, misrecognitions, the choice of words, identifications with plot characters, and so on. The clinician will want to look closely at the nature of the TAT heroes or heroines and at their needs and goals. The environmental presses are also important, as is the general emotional ambiance of the themes.

SENTENCE COMPLETION TECHNIQUES

A very durable and serviceable, yet simple, technique is the *sentence completion method*. The most widely used and best-known of the many versions is the **Rotter Incomplete Sentences Blank**. The *Incomplete Sentences Blank* (/SB) consists of 40 sentence stems—for example, "I like . . ." "What annoys me? ..." "I wish . . ." and "Most girls . . ." Each of the completions can be scored along a 7-point scale to provide a general index of adjustment-maladjustment. The ISB has great versatility, and scoring schemes for a variety of variables have been developed.

The ISB has several advantages. The scoring is objective and reliable, due in part to extensive scoring examples provided in the manual. The ISB can be used easily and economically, and it appears to be a good screening device. Although it can be scored objectively, it also allows considerable freedom of response. Thus the ISB falls somewhere between the two extremes of the objective-projective dimensions. It represents a fairly direct approach to measurement that does not require the degree of training that is necessary, to example, to score the Rorschach. Some clinicians may be disturbed by the [SB's relative lack of disguise. Perhaps because of this, the ISB does not typically provide information that could not be gleaned from a reasonably extensive interview. In many ways, then, the ISB provides a cognitive and behavioral picture of the patient rather than a "deep, psychodynamic" picture.

WORD-ASSOCIATION TECHNIQUE

The word association technique was devised by Carl Gustav Jung, who presented stimulus words to patients and had them respond with the first word that came to mind. After the initial administration of the list, some clinicians repeat the list, asking the patient to respond with some words that he/she used previously. Discrepancies between the two administrations may reveal associational difficulties. Complex indicators include long reaction times, blocking difficulties in making responses, unusual responses, repetition of the stimulus words, appearance Misunderstanding of the word, clang

association, preservation of earlier responses, and ideas or unusual mannerism of movements accompanying the responses. Because it is easily qualified, the test has continued to be used as a research instrument, although its popularity has diminished greatly over the years.

ADVANTAGES OF PROJECTIVE TECHNIQUES

First advantage is the amount, richness and accuracy of information that is collected. Another advantage is that a variety of projective techniques are frequently used in the context of individual interviews or conventional focus group discussions (breaking the ice). Projective techniques also help to open discussions around socially sensitive issues, where the client may be embarrassed, or feel a lack of knowledge. These techniques are also useful in encouraging in subjects a state of freedom and spontaneity of expression, where they may hesitate to express their opinion directly for fear of disapproval or when they find them threatening for some other reasons.

DISADVANTAGES

Primary disadvantage is the **complexity of data** and the corresponding skills required of the researcher. Interpreters need to be very trained and skilled. They are expensive to administer because highly trained staff is needed to be employed.

THE OBSERVATIONAL ASSESSMENT AND ITS TYPES

Observation is a visual method of gathering information on **activities**: of what happens, what your object of study does or how it behaves.

In the study of products you may be interested in activities because some products *are* essentially activity with little or no tangible essence, like computer programs, courses of education, dramas and other presentations on stage or on TV. There are also activities related to "static" artifacts, notably their manufacture and use that you perhaps will want to study.

OBSERVATION METHODS

To assess and understand behavior, one must first know what one is dealing with. It comes as no surprise, then, that behavioral assessment employs **observation** as a primary technique. A clinician can try to understand a phobic's fear of heights, a student's avoidance of evaluation settings, or anyone's tendency to overeat. These *people* could be interviewed or assessed with self-report inventories. But many clinicians would argue that unless those people are directly observed in their natural environments, true understanding will be incomplete. To determine the frequency, strength, and pervasiveness of the problem behavior or the factors that are maintaining it, behavioral clinicians advocate direct observation.

Of course, all this is easier said than done. Practically speaking, it is difficult and expensive to maintain trained observers and have them available. This is especially true in the case of adults who are being treated on an outpatient basis. It is relatively easier to accomplish with children or those with cognitive limitations. It is likewise easier to make observations in a sheltered or institutional setting. In some cases, it is possible to use observers who are characteristically part of the person's environment (such as spouse, parent, teacher, friend, or nurse). In certain instances, it is even possible to have the client do some self-observation. Of course, there is the ever-present question of ethics. Clinical psychologists must take pains to make sure that people are not observed without their knowledge or that friend and associates of the client are not *unwittingly* drawn into the observational net in a way that compromises their dignity and right to privacy.

For all these reasons, naturalistic observation has never been used in clinical practice as much as it might be. Indeed, observation is still more prominent in research than in clinical practice. However, one need not be a diehard proponent of the behavioral approach to concede the importance of observational data. It is not unlikely that clinicians of many different persuasions have arrived at incomplete pictures of their clients. After all, they may never see them except during the 50-minute therapy hour or through the prism of objective or projective test data. But because of the cumbersome nature of many observational procedures, for years most clinicians opted for the simpler and seemingly more efficient methods of traditional assessment.

NATURALISTIC OBSERVATION

Naturalistic observation is hardly a new idea. McReynolds (1975) traced the roots of naturalistic observation to the ancient civilizations of Greece and China. About 50 years ago, Barker and Wright (1951) described their systematic and detailed recordings of the behavior of 7 year-old over one day (a major effort that took an entire book). Beyond this, all of us recognize instantly that our own informal assessments of friends and associates are heavily influenced by observations of their naturally occurring behavior. But observation, like testing, is useful only when steps are taken to ensure its reliability and validity.

Example of Naturalistic Observation

Over the years, many forms of naturalistic observation have been used for specific settings. These settings have included classrooms, playgrounds, general and psychiatric hospitals, home environments, institutions for those with mental retardation, and therapy sessions in outpatient clinics. Again, it is important to note that many of the systems employed in these settings have been most widely used for research purposes. But most, of them are adaptable for clinical use.

Home Observation

Because experiences in the family or home have such pervasive effects on adjustment, it is not surprising that a number of assessment procedures have been developed for behaviors occurring in this setting. One of the best known systems for *home observation* is the **Behavioral Coding System (BCS)** developed by Patterson (1977) and his colleagues (Jones, Reid, & Patterson, 1979). This observational system was designed for use in the homes of pre-delinquent boys who exhibit problems in the areas of aggressiveness and noncompliance. Trained observers spend one or two hours in the homes of such boys, observing and recording family interactions. Usually the observations are made immediately before or during dinner. Observers are not allowed to interact with family members (although occasionally they may talk with them before or after the observations to gain better acceptance of the procedure). Each family member is observed for two 5-minute periods during each observational occasion. Observations are made of behaviors in 28 categories, and every 6 seconds during the period a given family member is being observed, the observer notes whether these behaviors have or have not occurred.

In a recent study, Patterson and Forgatch (1995) reported observational data-in this case, the sum of multiple categories of aversive behavior (such as yelling humiliating destructiveness) ---coded from home interactions between 67 children and their respective families. All these children had been referred for treatment because of antisocial behavior problems. Interestingly, Patterson and Forgatch (1995) found that children's aversive behavior scores at treatment termination significantly predicted future arrests over the two-year follow-up period. In contrast, no teacher, mother, or father rating of the children at termination significantly predicted arrests. Thus, in this study, the predictive *value of* naturalistic observation (over more traditional ratings by parents or teachers) was demonstrated.

School Observation

Clinical child psychologists must often deal with behavior problems that take place in the school setting; some children are disruptive in class, overly aggressive on the playground, generally fearful, cling to the teacher, will not concentrate, and so on. Although the verbal reports of parents and teacher are useful, the most direct assessment procedure is actually to observe the problem behavior in its natural habitat. Several coding systems have been developed over the years for use in *school observation*.

An example of a behavioral observation system used in school settings is Achenbach's (1994) **Direct Observation Form (DOF)** of the Child Behavior checklist. The DOF is used to assess problem behaviors that may be observed in school classrooms or other settings (Achenbach, 1994). It consists of 96 problem items, as well as an open-ended item that allows assessors to indicate problem behaviors not covered by these items. Assessors are instructed to rate each item according to its frequency duration and intensity within a 10 minute observation period. It is recommended that three to six 10-minute observation periods be completed so that scores can be averaged across occasions (Achenbach, 1994). In this way, a more reliable and stable estimate of the child's level of behavior problems in the classroom can be obtained.

Hospital Observation

Observation techniques have long been used in such settings as *psychiatric* hospitals and institutions for those with mental retardation. The sheltered characteristics of these settings have made careful observation of behavior much more feasible than in more open, uncontrolled environments.

An example of a *hospital observation* device is the **Time Sample Behavioral Checklist (TSBC)** developed by Gordon Paul and his associates (Mariotto & Paul, 1974). It is a time-sample behavioral checklist that can be used with chronic psychiatric patients. By time-sample is meant that observations are made at regular intervals for a given patient. Observers make a single 2second observation of the patient once every waking hour. Thus, a daily behavioral profile can be constructed on each patient. Interobserver reliability for this checklist has typically been quite high, and such scales as the TSBC are helpful providing a comprehensive behavioral picture of the patient. For example, using the TSBC, Menditto et al. (1996) documented how a combination of a relatively new antipsychotic medication (clozapine) and a structured social learning program (Paul & Lentz, 1977) helped significantly decrease the frequency of inappropriate behaviors and aggressive acts over a 6 month period in a sample of chronically mentally ill patients on an inpatient unit.

CONTROLLED OBSERVATION

Naturalistic observation has a great deal of intuitive appeal. It provides a picture of how individuals actually behave that is unfiltered by self-reports, inferences, or other potentially contaminating variables. However, this is easier said than done. Sometimes the specific kind of behavior in which clinicians are interested does not occur naturally very often. Much time and resources can be wasted waiting for the right behavior or situation to happen. The assessment of responsibility taking, for example, may require day after day of expensive observation before the right situation arises. Then just as the clinician is about to start recording, some unexpected "other" figure in the environment may step in to spoil the situation by subtly changing its whole character. Furthermore, in free-flowing, spontaneous situations, the client may move away so that conversations cannot be overheard, or the entire scene may move down the hall too quickly to be followed. In short, naturalistic settings often put clinicians at the mercy of events that can sometimes overwhelm opportunities for careful, objective assessment. As a way of handling these problems, clinicians sometimes use controlled observation.

For many years, researchers have used techniques to elicit controlled samples of behavior (Lanyon & Goodstein, 1982). These are really *situational tests* that put individuals in situations more or less similar to those of real life. Direct observations are then made of how the individuals react. In a sense, this is a kind of work-sample approach in which the behavioral test situation and the criterion behavior to be predicted are quite similar. This should reduce errors in prediction, as contrasted, for example, to psychological tests whose stimuli are far removed from the predictive situations.

STUDIES IN HONEST AND DECEIT

Early arrivals on this scene were the studies of Hartshorne and May and their associates (1928, 1929, 1930). Although Hartshorne and May were oriented principally toward research, the approaches they used have found direct application in the assessment field. Because Hartshorne and May viewed personality or character in habit-response terms, they attempted to measure it by directly sampling behavior. For example if one wants to assess children's honesty, why not do so by confronting them with situations where cheating is possible and then observe their responses? This is exactly what Hartshorne and May did in assessing such behaviors as cheating, lying, and 'stealing. Using a series of ingenious natural settings, they were able to execute their research under disguised yet highly controlled conditions. Of particular interest were data that suggested that children's deceitful behavior was highly situation-specific and should not be construed as reflecting a generalized trait.

RESPONSE TO STRESS

During World War II, the urgent demand for highly trained and resourceful military intelligence personnel led to the development of a series of situational stress tests. Instead of using personality tests to assess the manner in which the individual might handle disruptive or emotionally stressful situations, the U.S. Office of Strategic Services used assigned tasks (OSS Assessment Staff, 1948). Through both objective records and qualitative observation by trained staff, the assessment of reaction

to stress was undertaken. Although the demands of war did not provide many good opportunities for the strict validation of OSS assessment techniques, they did provide an excellent model of what is possible in assessment. A sample OSS task is the following:

A large cube had to be constructed out of pegs, poles, and blocks. Since the job could not be done by one person alone, two helpers were provided-but the task had to be completed in 10 minutes. The helpers were actually stooges who interfered, were passive, made impractical suggestions, and the like. They ridiculed the candidate and generally frustrated him terribly. In fact, no candidate was ever successful in assembling the cube.

Somewhat related techniques were used in selecting candidates for the British Civil Service - (Vernon,1950). Although stress was not incorporated into the British procedures, the tasks on which candidates worked prior to their selection were based on careful job analyses. L. V. Gordon (1967) has evaluated several work-sample approaches to assessment used in the prediction of the performance of Peace Corps trainees.

PARENT ADOLESCENT CONFLICT

In order to more accurately assess the nature and degree of parent-adolescent conflict, Prinz and Kent (1978) developed the Interaction Behavior Code (IBC) system. Using the IBC, several raters review and rate audio taped discussions of families attempting to resolve a problem about which *they* disagree. Items are rated separately for each family member according to the behavior's presence or absence during the discussion (or for some items, the degree to which they are present). Summary scores are calculated by averaging scores (across raters) for negative behaviors and positive behaviors.

For the strict behaviorist, of course, the preceding techniques represent a mixture of observation and inference. When ratings of leadership, stress level, or ingenuity are made, what is really happening is that observers are inferring something from behavior. They are not just compiling lists of behaviors or checking off occurrences.

CONTROLLED PERFORMANCE TECHNIQUES

As seen in the OSS assessment studies, controlled situations allow one to observe behavior under conditions that offer potential for control and standardization. A more exotic example is the case in which A. A. Lazarus (1961) assessed claustrophobic behavior by placing a patient in a closed room that was made progressively smaller by moving a screen. Similarly, Bandura (1969) has used films to expose people to a graduated series of anxiety-provoking stimuli.

A series of assessment procedures using *controlled performance techniques* to study chronic snake phobias illustrates several approaches to this kind of measurement (Bandura, Adams, & Beyer, 1977).

BEHAVIORAL AVOIDANCE

The test of avoidance behavior consisted of a series of 29 performance tasks requiring increasingly more threatening interactions with a red-tailed boa constrictor. Subjects were instructed to approach a glass cage containing the snake, to look down at it, to touch and hold the snake with gloved and then bare hands, to let it loose in the room and then return it to the cage, to hold it within 12 cm of their faces, and finally to tolerate the snake crawling in their laps while they held their hands passively at their sides.... Those who could not enter the room containing the snake received a score of 0; subjects who did enter were asked to perform the various tasks in the graded series. To control for any possible influence of expressive cues from the tester, she stood behind the subject and read aloud the tasks to be performed.... The avoidance score was the number of snake-interaction tasks the subject performed successfully.

SELF MONITORING

In the previous discussion of naturalistic observation, the observational procedures were designed for use by trained staff: clinicians, research assistants, teachers, nurses, ward attendants, and others. But such procedures are often expensive in both time and money. Furthermore, it is necessary in most cases to rely on time-sampling or otherwise limit the extent of the observations. When dealing with individual clients, it is often impractical or too expensive to observe them as they move freely about in their daily activities. Therefore, clinicians have been relying increasingly on *self-monitoring* in-which individuals observe and record their own behaviors, thoughts, and emotions

In effect, clients are asked to maintain behavioral logs or diaries over some predetermined time period. Such a log can provide a running record of the frequency, intensity, and duration of certain target behaviors, along with the stimulus conditions that accompanied them and the consequences that followed. Such data are especially useful in telling both clinician and client how often the behavior in question occurs. In addition, it can provide an index of change as a result of therapy (for example, by comparing baseline frequency with frequency after six weeks of therapy). Also, it can help focus the client's attention on undesirable behavior and thus aid in reducing it. Finally, clients can come to realize the connections between environmental stimuli, the consequences of their behavior, and the behavior itself.

Of course, there are problems with self monitoring. Some clients may-be inaccurate r may purposely distort their observations or recordings for various reasons. Others may simply resist the whole procedure. Despite these obvious difficulties, self-monitoring has become a useful and efficient technique. It can provide a great deal of information at very low cost. However, self-monitoring is usually effective *as* a change agent only in conjunction with a larger program of therapeutic intervention.

A variety of monitoring aids has been developed. Some clients are provided-with. small counters or stopwatches, depending upon what are to be monitored. Small file-sized or wallet sized cards have been developed upon which clients can quickly and unobtrusively record their data. At a more informal level, some clients are simply encouraged to make entries in a diary. Such aids are especially useful when assessing or treating such problems as obesity, smoking, lack of assertiveness, and alcoholism. These aids can help reinforce the notion that one's problems can be reduced to specific behaviors. Thus, a client who started with global complaints of an ephemeral nature can begin to see that "not feeling good about myself" really involves inability to stand up for one's rights in specific circumstances, speaking without thinking, or whatever

The dysfunctional thought record (DTR) is completed by the client and provides the client and therapist with a record of the client's automatic thoughts that are related to dysphoria or depression (J. S. Beck, 1995). This DTR can help the therapist and client target certain thoughts and reactions for change in a cognitive-behavioral treatment for depression. The client is instructed to complete the DTR when she or he notices a change in mood. The situation, automatic thought(s), and associated emotions are specified. The final two columns of the DTR can be filled out in the therapy session and serve as a therapeutic intervention. In this way, clients are taught to recognize, evaluate, and modify these automatic dysfunctional thoughts.

VARIABLES AFFECTING RELIABILITY OF OBSERVATIONS

Whether their data come from interviewing, testing, or observation, clinicians must be assured that the data are reliable. In the case of observation, clinicians must have confidence that different observers will produce basically the same ratings and scores. For example, when an observer of interactions in the home returns ratings of a spouse's behavior as "low in empathy," what assurance does the clinician have that someone else rating the same behavior *in* the same

circumstances would have made' the same report? Many factors can affect the reliability of observations. The following is a good sample of these factors.

COMPLEXITY OF TARGET BEHAVIOR

Obviously, the more complex the behavior to be observed, the greater the opportunity for unreliability. Behavioral assessment typically focuses on less complex, lower-level behaviors (Haynes, 1998). Observations about what a person eats for breakfast (lower-level behavior) are likely to be more reliable than those centering on interpersonal behavior (higher-level, more complex behavior). This applies to self-monitoring as well. Unless specific agreed-upon behaviors are designated, the observer has an enormous range of behavior upon which to concentrate. Thus, to identify an instance of interpersonal aggression, one observer might react to sarcasm while another would fail to include it and focus instead on clear, physical acts.

TRAINING OBSERVERS

There is no substitute for the careful and systematic training of observers. For example; observers who are sent into psychiatric hospitals to study patient behaviors and then make diagnostic ratings must be carefully prepared in advance. It is necessary to brief them extensively on just what the definition of, say, depression is, what specific behaviors represent depression; and so on. Their goal should not be to "please" their supervisor by coming up (consciously or unconsciously) with data "helpful" to the project. Nor should they protect one another by talking over their ratings and then "agreeing to agree."

Occasionally there are instances of *observer drift*, in which observers, who work closely together subtly, without awareness, begin to drift away from other observers in their ratings. Although reliability among the drifting observers may be acceptable, it is only so because, over time, they have begun to shift their definitions of target behaviors. Occasionally, too, observers are not as careful in their observations when they feel they are on their own as when they expect to be monitored or checked (Reid, 1970). To guard against observer drift, regularly scheduled reliability checks (by an independent rater) should be conducted and feedback provided to raters.

VARIABLES AFFECTING VALIDITY OF OBSERVATIONS

At this point, it seems unnecessary to reiterate the importance of validity. We have encountered the concept before in our discussions of both interviewing and testing; it is no less critical in the case of observation. But here, issues of validity can be deceptive. It seems obvious in interviewing that what patients tell the interviewer may not correspond to their actual behavior in non interview settings. Or in the case of projective tests, there may be validity questions about inferring aggression from Rorschach responses that involve vicious animals, blood, or large teeth. After all, percepts are not the same as "real" behavior. But in the case of observation, things seem much clearer. When a child is observed to bully his peers unmercifully and these observations are corroborated by reports from teachers, there would seem to be little question of the validity of the observers' data. Aggression is aggression: However, things are not always so simple, as the following discussion will illustrate.

CONTENT VALIDITY

A behavioral observation schema should include the behaviors that are deemed important for the research or clinical purposes at hand. Usually the investigator or clinician who develops the system also determines whether or not the system shows content validity. But this process is almost circular, in the sense that a system is valid if the clinician decides that it is valid. In developing the Behavioral Coding System (BCS), Jones et al. (1975), circumvented this problem by organizing several categories of noxious behaviors in children and then submitting them for ratings. By using mothers' ratings, they were able to confirm their own a priori clinical judgments as to whether or not certain deviant behaviors

were in fact noxious or aversive.

CONCURRENT VALIDITY

Another way to approach the validity of observations is to ask whether one's obtained observational ratings correspond to what others (such as teachers, spouse, and friends) are observing in the same time frame. For example, do observational ratings of children's aggression on the playground made by trained observers agree with the ratings made by the children's peers? In short, do the children perceive each other's aggression in the same way that observers do?

CONSTRUCT VALIDITY

Observational systems are usually derived from some implicit or explicit theoretical framework. For example, the BCS of Jones et al. (1975) was derived from a social learning framework that sees aggression as the result of learning in the family. When the rewards for aggression are substantial, aggression will occur. When such rewards are no longer contingent on the behavior, aggression should subside. Therefore, the construct validity of the BCS could be demonstrated by showing that children's aggressive behavior declines from a baseline point after clinical treatment, with clinical treatment defined as rearranging the social contingencies in the family in a way that ought to reduce the incidence of observed aggression.

MECHANICS OF RATINGS

It is important that a unit of analysis be specified. A unit of analysis is the length of time observations will be made, along with the type and number of responses to be considered. For example, it might be decided that every physical movement or gesture will be recorded for 1 minute every 4 minutes. The total observational time might consist of a 20-minute recess period for kindergarten children. This means that every 4 minutes the child would be observed for 1 minute and all physical movements recorded. These movements would then be coded or rated for the variable under study such as aggression, problem solving, or dependency).

In addition to the units of analysis chosen, the specific form that the ratings will take must also be decided. One could decide to record behaviors along a dimension of intensity: How strong was the aggressive behavior? One might also include a *duration* record: How long did the behavior last? Or one might use a simple *frequency* count: How many times in a designated period did the behavior under study occur?

Beyond this, a scoring procedure must be developed. Such procedures can range from making check marks on a sheet of paper attached to a clipboard to the use of counters, stopwatches, timers, and even laptop computers. All raters, of course, will employ the same procedure.

REACTIVITY

Another factor affecting the validity of observations is called *reactivity*. Patients or study participants sometimes react to the fact that they are being-observed by changing the way they behave. The talkative person suddenly becomes quiet. The complaining spouse suddenly becomes the epitome of self-sacrifice. Sometimes an individual may even feel the need to apologize for the dog by saying; "He never does that when he is alone with us." In any case, reactivity can severely hamper the validity of observations because it makes the observed behavior unrepresentative of what normally occurs. The real danger of reactivity is that the observer may not recognize its presence. If observed behavior is not a true sample, this affects the extent to which one can generalize from this instance of behavior. Then, too, observers may unwittingly interfere with or influence the very behavior they are sent to observe. In the case of sexual dysfunction, for example, Conte (1986) has noted that behavioral ratings are so intrusive that

clinicians usually have to *rely* on self-report methods.

SUGGESTIONS FOR IMPROVING RELIABILITY AND VALIDITY OF OBSERVATIONS

- 1) Decide on target behaviors that are both relevant and comprehensive.
- 2) Work from an explicit theoretical framework that will help define the behaviors of interest.
- 3) Employ trained observers
- 4) Make sure that the observational format is strictly specified
- 5) Be aware of such potential sources of error as bias and fluctuations in concentration.
- 6) Consider the possibility of reactivity
- 7) Give careful consideration to how representative the observations really are

THE BEHAVIORAL ASSESSMENT THROUGH INTERVIEWS, INVENTORIES AND CHECK LISTS

BEHAVIORAL ASSESSMENT

Careful assessment lies at the heart of all clinical interventions. Same is the case, when using the behavioral theoretical model in therapy. The emphasis on making a careful assessment of the patient and his life circumstances before, during, and following treatment is one of the most distinguishing features of the various clinical procedures.

DEFINITION OF BEHAVIOR

There are two broad categories of behavior which have been recognized by most behavior therapists. These categories are **respondents** and **operants**.

Respondents are the antecedent-controlled behaviors which function in a reflexive manner. They are the most stereotyped kinds of behaviors, having relatively fixed patterns across populations as well as within individuals. Respondents include

- Somatic reflexes
- Emotional reactions and other responses of the smooth muscles, glands, and heart, and
- Sensations

Each sub-type of respondent may be elicited by appropriate unconditioned stimuli. For example, a sudden, unexpected noise may cause a person to hear the noise (an auditory sensation), to jump (a somatic reflex), and to be afraid momentarily (an emotional reaction). Such unconditioned responses may be conditioned to occur in response to previously neutral stimuli.

Operants include

- Actions
- Instrumental responses of the smooth muscles, glands, heart and
- Cognitions

Whereas respondents are antecedent-controlled behaviors, operants are consequence-controlled. In case of respondent behavior, the environment produces changes in the patient's behavior; but in the case of operant behavior, the patient's behavior produces changes in his world.

ASSESSMENT TASKS

The basic tasks of the behavior therapist in performing an assessment are to *identify*, *classify*, *prophesy* (predict), *specify* and *evaluate*. The specific tasks under each of these general tasks and the procedures needed to perform them are described below.

Identify

The behavior therapist needs to *identify* all of the antecedents which are affecting the patient's target behaviors; the respondents which are of concern to the patient; the operants which are of concern to the patient; the consequences which currently follow the designated operants; and those consequences which could be programmed into the therapy plan to benefit the patient. The therapist also needs to

identify the setting events which are influencing the patient's behavior to obtain a full overview of the biological, physiological, and anatomical concomitants of the patient's clinical picture

Classify

Once this information has been obtained, it needs to be *classified*. A useful classification procedure is to group behaviors according to those which need to be weakened or removed (i.e. behavioral excesses), those which need to be strengthened or added (i.e. behavioral deficits), and those which are inherently inappropriate (i.e. behavioral anomalies). Then there are those behaviors which are valued by the patient and/or which are valued by others with whom the patient lives and which are presently in his or her repertoire (i.e. behavioral assets), as these are crucial in planning treatment.

Prophecy (prediction)

Although *prophesying* is not an activity which would seem to attract most behavior therapists, most engage in some form of prediction. Prediction seems to account for much less of behavior therapist's assessment activities, however, than is true for therapists of many other theoretical orientations. To the extent that behavior therapists do engage in prediction regarding individual cases, they tend to use actuarial data as a basis for their predictions. Moreover commonly, however, they simply attempt to control therapeutically the present target behaviors, rather than attempting to make predictions about the way a given patient might react to a hypothetical situation some time in the future.

Specify

Specifying precise goals, methods of intervention, and therapeutic agents is an important part of the behavioral assessment process. The specification of goals, methods of intervention and therapeutic agents corresponds basically to the "recommendations" section of the traditional psychological evaluation. There is a general tendency for behavioral therapists to try to specify clearly enough so that any informed clinician could carry out the prescribed procedures.

Evaluation

The final assessment task, evaluation, can be broken down into three subcategories: **process evaluation**, **outcome evaluation**, and **follow-up evaluation**. An adequate behavioral assessment will initially prescribe and then carry out procedures to identify what changes are occurring in behavior during the course of treatment; where the patient is at the termination of formal treatment; and where the patient is after some specified period or periods following the termination of treatment.

THE BEHAVIORAL TRADITION

Before we examine specific methods of behavioral assessment, let us consider three broad ways in which it differs from traditional assessment.

SAMPLE VERSUS SIGN

When test responses are viewed as a sample, one assumes that they parallel the way in which a person is likely to behave in a nontest situation. Thus, if a person responds aggressively on a test, one assumes that this aggression also occurs in other situations as well. When test responses are viewed as signs, an inference is made that the performance is an indirect or symbolic manifestation of some other characteristic (**Goldfried, 1976**)

A description of the situation is much less important than the identification of the more enduring personality characteristics. In behavioral assessment, the paramount issue is how well the assessment device samples the behaviors and situations in which the clinician is interested. For the most part, traditional assessment has employed a sign as opposed to sample approach to test interpretation. In the case of behavioral assessment only the sample approach makes sense.

Functional Analysis: Another central feature of behavioral assessment is traceable to Skinner’s (1953) notion of *functional analysis*. This means that exact analyses are made of the stimuli that precede a behavior and the consequences that follow it. Behaviors are learned and maintained because of consequences that follow them. Thus, to change an undesirable behavior, the clinician must

- 1) Identify the stimulus conditions that precipitate it and
- 2) Determine the reinforcements that follow.

Once these two sets of factors are assessed, the clinician is in a position to modify the behavior by manipulating the stimuli and/or reinforcements involved.

Besides there are certain other considerations of behavior assessors:

- The behavior of concern must be described in observable, measurable terms so that its rate of occurrence can be recorded reliably. Both *antecedent conditions* and *consequence events* are thus carefully elaborated.
- A behavioral assessment ignores such hypothesized internal determinants as “needs” and focus instead on the target—behavior of concern.
- A functional analysis reveals that *stimulus* is followed by *behavior* which in turn is followed by consequence.
- Most behavioral therapists have broadened the method of functional analysis to include “**organismic**” variables as well. *Organismic variables* include physical, physiological, or cognitive characteristics of the individual that are important for both the conceptualization of the client’s problem and the ultimate treatment that is administered. For example, it may be important to assess attitudes and beliefs that are characteristic of individuals who are prone to experience depressive episodes because of their purported relationship to depression as well as their suitability as target for intervention.

SORC MODEL

A useful model for conceptualizing a clinical problem from a behavioral perspective is the **SORC model**.

S = stimulus or antecedent conditions that bring on the problematic behavior

O = organismic variables related to the problematic behavior

R = response or problematic behavior

C = consequences of the problematic behavior

Behavioral clinicians use this model to guide and inform them regarding the information needed to fully describe the problem and, ultimately, the interventions that may be prescribed.

BEHAVIORAL ASSESSMENT AS AN ONGOING PROCESS

Peterson and Sobell (1994) pointed out, that behavioral assessment in a clinical context is not a **one-shot** evaluation performed before treatment is initiated. In fact, **it is an ongoing process that occurs before, during, and after treatment**. Behavioral assessment is important because it informs the initial selection of treatment strategies, provides a means of feedback regarding the efficacy of the treatment strategies employed as they are enacted in the treatment process, allows evaluation of the overall

effectiveness of treatment once completed, and highlights situational factors that may lead to recurrence of the problematic behavior(s)

METHODS OF BEHAVIORAL ASSESSMENT

A wide range of methods has been developed for use in behavioral assessment. These methods and measures can be implemented across the age range from children to adults and can be used to examine different areas of functioning (e.g. classroom performance, marital communication, psychopathology, social skills, Psycho physiological functioning).assessment information can be drawn from different sources, including observation by clinicians or other trained observers, reports by the clients themselves, and rating by significant others (e.g. Parents, Teachers, Spouses). Information can also be obtained about behavior in different settings (e.g. Home, School, Work, Community), regardless of the specific method or measure that is used, however or the particular area of functioning that is assessed, a critical distinguishing feature of this approach is on the emphasis of behaviors (or cognitions or physiology) that occur in specific situations. In the following sections we will describe three broad classes of behavioral assessment methods: behavioral interviewing, and self-report inventories.

BEHAVIORAL INTERVIEWING

We know the various approaches to interviewing, including the use of structured diagnostic interviews. In contrast to many forms of interviewing in clinical psychology, **behavioral interviewing** is used to obtain information that will be helpful in formulating a functional analysis of behavior (Haynes & O'Brien, 2000). That is behavioral interviews focus on describing and understanding the relationships among antecedents, behaviors, and consequences. Behavioral interviews tend to be more directive than other nonbehavioral interviews, allowing the interviewer to obtain detailed descriptions of the problem behaviors and of the patient's current environment. Kratochwill (1985) suggests that behavioral interviews follow a four-step problem-solving format.

1. **Problem identification**, in which a specific problem is identified and explored and procedures are selected to measure target behaviors
2. **Problem analysis**, conducted by assessing the client's resources and the contexts in which the behaviors are likely to occur
3. **Assessment planning**, in which the clinician and client establish an assessment plan to be implemented, including ongoing procedures to collect data relevant to assessment and intervention
4. **Treatment evaluation**, in which strategies are outlined to assess the success of treatment, including pre- and post assessment procedures.

Thus, behavioral interviewing focuses not only on obtaining information within the interview session, but also on making plans to obtain information on behavior outside the interview, in the environment in which the behavior naturally occurs.

One important reason that behavioral interviews are more directive than most other kinds of interviews is that clients will often describe their difficulties in trait terms. That is, they will speak of being "**anxious**" or "**depressed**" or "**angry**". The behavioral clinician must then work with the client to translate these broad terms into more specific and observable behaviors. For example, "**being anxious**" may mean breathing rapidly, sweating profusely, experiencing an increase in heart rate, having cognitions about danger and threat, and avoiding- specific types of situations. In the following example, the interviewer helps quantify a client's difficulties in behavioral terms:

Interviewer: It sounds like you have been having difficulty in a number of areas, but your conflicts with your roommate are the most trouble right now.

Client: Yes, he's inconsiderate and I can't stand being around him.

Interviewer: I'd like to ask some more questions about what happens when you are the most bothered about it. Can you pick a particular disagreement and tell me how you felt at the time?

Client: He really pissed me off when I came in last night and wanted to go to sleep. He wouldn't turn the TV off, and I couldn't sleep with the light and the noise.

Interviewer: How angry were you? Can you rate it from 1 to 10, with 10 being the most angry you've ever been?

Client: *I* guess about a 6. What does that matter?

Interviewer: Well, I'm wondering if you also felt anything else, like tension, nervousness, anxiety, apprehension. If so, how much?

Client: *I* was tense, too. About a 6, I guess. We don't really talk much except about the V and superficial things about school.

Interviewer: When do you feel the most angry, and also the most tense? For example. When you were walking into the room. Before? After he didn't turn down the TV?

Client: I was getting tense coming into the room, thinking what a drag this roommate situation was, and then when he kept watching TV, I was so angry I couldn't sleep. (Adapted from Sarwer & Sayers, 1998, p. 70)

As this example makes clear, the client and therapist will work together to describe and understand the problem behaviors. Where and when they occur, and the impact they have on the client's relationships. The information obtained in a behavioral interview should be helpful to the clinician both in generating hypotheses about what specific behaviors or contextual factors to target in an intervention and in developing further plans for additional behavioral assessment procedures, such as direct observation or self monitoring.

An excellent example of behavioral interviewing is found in the work of psychologist **Russell Barkley** and his colleagues, who have developed extensive interview protocols for use in the behavioral assessment of attention deficit/ hyperactivity disorder, or ADHD. One portion of the interview generates information on the nature of specific parent-child interactions that are related to the defiant and oppositional child behaviors often associated with ADHD. The interviewer reviews a series of situations that are frequent sources of problems between children and parents and solicit detailed information about those situations that are particularly problematic. For example, parents may report that their child has temper tantrums, during which the child cries, whines, screams, hits, and kicks. A behavioral interview will be used as a first step in determining precisely what these behaviors look like when they occur, in which situations the behaviors occur (e.g., while the parent is on the telephone, in public places, at bedtime), and in which situations they do not occur (e.g., when the child is playing alone, playing with other children, at mealtimes). Additional information is then sought regarding the sequence of events, including the behaviors of the parents and the child that unfold during a tantrum. This type of situationally focused interview provides a detailed picture about how the parent perceives the antecedents and consequences that surround the child's problematic behaviors.

In sum, behavioral interviewing is the first step in conducting a comprehensive behavioral assessment of a problem behavior and the contextual variables that may be controlling the behavior. A behavioral interview is more direct than are unstructured clinical interviews and focuses explicitly on the occurrence (or nonoccurrence) of specific behaviors. It is important to point out that, despite the relatively narrow focus of the behavioral interview, we know little about its reliability and validity. In fact, there is evidence indicating that behavioral interviews are only moderately reliable.

INVENTORIES AND CHECKLISTS

Behavioral clinicians have used a variety of self report techniques to identify behaviors, emotional responses, and perceptions of the environment. The fear Survey Schedule (Geer, 1965; Lang & Lazovik, 1963) has been widely used. It consists of 51 potentially fear-arousing situations and requires the patient to rate the degree of fear each situation arouses. Other frequently used self-report inventories include the Rathus Assertiveness Schedule (Rathus, 1973), the Beck Depression Inventory (Beck, 1972), the Youth Self Report (Achenbach, 1991), and the Marital Conflict Form (Weiss & Margolin, 1977).

Notably absent from this brief and partial listing of inventories are instruments that have a psychiatric diagnostic orientation. Historically, this has been a conscious omission on the part of behavioral assessors, who generally found little merit in psychiatric classification (Follette & Haves, 1992). Their tests were more oriented toward the assessment of specific behavioral deficits, behavioral inappropriateness, and behavioral assets (Sundberg, 1977). The focus of behavioral inventories is, in short, behavior. Clients are asked about specific actions, feelings, or thoughts that minimize the necessity for them to make inferences about what their own behavior really means.

Inventories have also been developed that assess the person's perception of the social environment (Insel & Moos, 1974). The scales that Moos and his colleagues have developed attempt to assess environments in terms of the opportunities they provide for relationships, personal growth, and systems maintenance and change. There are separate scales for several environments, including work, family, classrooms, wards, and others.

RATING SCALES

Clinical psychologists have developed a number of rating scales and behavior checklists. These measures are intended to provide information on a wider range of an individual's behavior over a longer period of time than is possible with direct observation.

Rating scales have been developed to assess problem behaviors in children, adolescents, and adults. The importance of assessing the behavior of children and adolescents in their natural environments is widely recognized. Children's behavior may differ in critical ways depending on whether they are at home, at school, alone, or with peers, and it is important to obtain samples or reports of their behaviors in these different settings. It is also important that ratings of children's behavior be obtained from different people, or informants, in the children's lives, most typically from parents, teachers, and peers. In fact, numerous studies have found only modest levels of agreement among different informants with respect to ratings of the children's behavior, and only modest agreement between the informants and the children themselves, for similar findings with adult psychiatric patients). These findings highlight the importance of situational factors in rating children's behavior and underscore the need for assessments in different contexts. The findings also indicate that different informants may offer unique perspectives or judgments regarding children's behavior.

A number of different rating scales have been developed to assess problem behaviors in children and adolescents (e.g., the Revised Behavior Problem Checklist, Quay, 1983; the Revised Conners Parent Rating Scale, Conners, Sitarenios, Parker, & Epstein, 1998; the Conners/wells Adolescent Self-Report of Symptoms, Conners et al., 1997; the Sutter-Eyberg Student Behavior inventory, Rayfield, Eyberg & Foote, 1998). The most widely used rating system for child and adolescent psychopathology, however, are the checklists developed by Achenbach and his colleagues. This system empirically integrates data obtained from parents (the Child Behavior Checklist or CBCL), teachers (the Teacher Report Form or TRF). And adolescents (the Youth Self-Report ;). Achenbach has utilized data from these three groups of informants in generating an empirically based taxonomy of child and adolescent psychopathology (e.g., Achenbach, 1995).

Rating scales have also been developed to assess behavior problems in adults. Typically, ratings on these scales have been made on the basis of information collected during an interview with the client. While some rating scales focus on a particular disorder (e.g., the Hamilton Rating Scale for Depression, Hamilton, 1967; the Yale-Brown Obsessive-Compulsive Scale, Goodman et al., 1989), other scales are broader (e.g., the Brief Psychiatric Rating Scale, Overall & Gorham, 1962; the Global Assessment Scale, Endicott, Spitzer, Fteiss, & Cohen, 1976). For example, interviewers using the Yale-Brown Obsessive-Compulsive Scale (e.g., Halmi et al., 2000) are required to make a rating from 0 to 4, indicating the client's level of distress or impairment around obsessions and compulsions. Similarly, interviewers who rate clients on the Hamilton Rating Scale for Depression rate several depressive symptoms, such as insomnia, depressed mood, and behavioral slowness, on 3- to 5-point scales. As is the case with most rating scales, the total score of all items can be used as an index of the severity of the particular disorder.

In part because they focus so explicitly on behaviors, all these rating scales have sound psychometric properties. Both the child and the adult measures have good internal consistency and test-retest reliability. As we noted earlier, there is not always perfect agreement among informants for the child rating scales. Consequently, Achenbach and McConaughy (1997) have formulated a decision tree, or flowchart, for assessors to follow based on the rating scale responses of different informants. Currently these behavioral rating scales are used more frequently in clinical research than they are in clinical practice (Silverman & Serafini, 1998), but as more data accrue, demonstrating the scales' utility in formulating effective treatment plans, this situation should change.

TECHNOLOGICAL ADVANCEMENT IN BEHAVIOR ASSESSMENT

Haynes (1998) has recently outlined several ways in which technological advances have begun to change the face of behavioral assessment methods that involve observation.

- ↳ The availability of laptop and hand-held computers facilitates the coding of observational data by assessors
- ↳ Hand-held computers can be assigned to clients so that clients can provide real-time self-monitoring data
- ↳ Hand-held computers can be programmed to prompt clients to respond to queries at specified times of the day or night
- ↳ Data from either laptop or hand-held computers can be loaded onto other computers that have greater processing and memory capacity so that observations can be aggregated, scored and analyzed

Behavioral assessment differs from traditional assessment in several fundamental ways. Behavioral assessment emphasizes direct assessments (naturalistic observations) of problematic behavior, antecedent (situational) conditions, and consequences (reinforcement). It is also important to note that behavioral assessment is an ongoing process, occurring at all points throughout treatment.

Some of the more common behavioral assessment methods include interviews, naturalistic and controlled observation, checklists and role playing or behavioral rehearsal. The variety of factors can affect the reliability and validity of observation which include the complexity of behavior, how observers are trained and monitored, and the unit of analysis, reactivity and behavioral coding system. Besides these technological advances are also being made in behavioral assessment.

THE PROCESS AND ACCURACY OF CLINICAL JUDGEMENT

As scientific and objective as clinical psychology has tried to become, it is still virtually impossible to evaluate its diagnostic and assessment techniques 'apart from the clinician involved. Clinical Judgment," is enough to suggest that clinicians use inferential processes that are often far from objective. The process, accuracy, and communication of clinical judgment are still very often extremely personalized phenomena.

In the discussion ahead we will examine some of the means by which the clinicians put together assessment data and arrive at particular conclusion. We will also discuss the accuracy of clinical judgment and impressions.

PROCESS AND ACCURACY

The discussion of clinical judgment will begin with its basic element----Interpretation.

INTERPRETATION

It is hard to disagree with L. H. Levy's (1963) statement that "Interpretation is the most important single activity engaged in by the clinician". Interpretation is an inferential process (Nisbett & Ross, 1980) that takes where assessment leaves off. The interviews have been completed; the psychological tests have been administered. Now, what does it all mean, and what decisions are to be made?

At the very least, clinical *interpretation* or judgment is a complex process. It involves

1. Stimuli----an MMPI-2 profile, an IQ score, a gesture, a sound, etc.
2. It also involves the clinician's response. "Is this patient psychotic?" "Is the patient's behavior expressive of a low expectancy for success?" Or even "What is the patient like?"
3. It also involves the characteristics of clinicians their cognitive structures and theoretical orientations.
4. Finally, situational variables enter into the process. These can include everything from the type and range of patients to the constraints that the demands of the setting place on prediction\$. For example, a clinician in a university mental health center may make a range of judgments from hospitalization to psychotherapy to just dropping out of school---whereas a clinician in a prison setting may be limited to many fewer options.

THE THEORETICAL FRAMEWORK

As we know that clinical psychologists strive to discover the etiology, or origins, of psychological problems and to understand patients so that they can be helped. Clinical problems can be conceptualized in a variety of ways (for example, psychodynamic, behavioral, and cognitive). The kinds of interpretations made by a Freudian are vastly different from those made by a behavioral clinician. Two clinicians may each observe that a child persistently attempts to sleep in his mother's bed.

For the Freudians, this becomes a sign of an unresolved Oedipus complex. For the behaviorist, the interpretation may be in terms of reinforcement.

Indeed, one way in which clinicians can evaluate interpretations is by examining their consistency with the theory from which they are derived. The number of interpretations that can be made from a set of observations, interview responses, or test data is both awesome and bewildering. By adopting a

particular theoretical perspective, clinicians can evaluate interpretations and inferences according to their theoretical consistency and can also generate additional hypotheses.

SIGNS, SAMPLES AND CORRELATES

Patient data can be viewed in several ways.

1. **Samples:** First, one can view such data as *samples*. Observations, test scores, test responses, or other data are seen as samples of a larger pool of information that could be obtained outside the consulting room. For example, when a patient does poorly on the Wechsler Memory Scale, this could be regarded as a sample of nontest behavior (memory problems).
2. **Signs:** A second way in which patient data can be interpreted is as signs of some underlying state, condition, or determinant. Aside from radical behaviorists, many clinicians will seek to infer from observations of the patient's behavior and test responses a variety of underlying determinants. For some clinicians, the underlying determinant might be anxiety, for others, ego strength; and for still others, expectancies. But in every case, the observation is seen as something that signifies underlying determinants. For example, poor on a patient's Rorschach responses is often interpreted as a sign of poor reality testing (psychosis).
3. **Correlates:** A third view of patient data emphasizes their status as *correlates* of other things. Once the anxious behavior, the flat affect, or the inability to concentrate have been noted in a depressed patient, the clinician might predict an associated decline in sexual activity, in social relationships, in willingness to seek employment, and so on. In effect, then, assessment data can be interpreted to suggest behavioral, attitudinal or emotional correlates.

LEVELS OF INTERPRETATION

Whether clinicians view clinical data as samples, signs, or correlates, they are making inferences that will enable them to go from those clinical data to recommendations, reports or predictions. Sundberg, Tyler, and Taplin (1973) have described three levels of inferences or interpretations.

LEVEL 1 interpretation generally involves little in the way of inference and certainly nothing in the way of a sign approach. From input to output, there are practically no intervening steps. For example, if it is known on the basis of past experience that students who sit in the front row of a class almost always get A's or B's, then clinicians can go directly from seat number to grade prediction without any necessity for intervening attributions of intelligence scores, previous courses, and so on. This simple yet efficient approach can dispense with high-level clinicians who make exotic inferences prior to their predictions; it can be handled by technicians, computers, or machines. Level I interpretations can often be used with large populations if the prime purpose is screening and if predicting the outcome for a specific person is relatively unimportant. A college entrance exam is a case in point. Here a single test score may predict with considerable accuracy the academic performance of 1,000 freshmen. Although that single score may be erroneous as a predictor for student X, a certain degree of error can easily be tolerated if one is interested primarily in the number who is likely to graduate.

LEVEL II interpretations involve two kinds' inferences. The clinician may observe a patient and then conclude that the observe behavior generally characterizes the patient. Sundberg et al call this first kind of inference descriptive *generalization*----still at the descriptive level. Thus, for a patient who fidgets, smokes cigarettes during the interview, and stammers the clinician may make a descriptive generalization----interview tension. If it turns out later that the patient has trouble relaxing at home, cannot sit through the meeting at the office. And is very worried about paying off the mortgage, the clinician may go to a broader descriptive generalization. The second kind of inference is a hypothetical construct that suggests an inner state and takes the clinician a bit beyond descriptive generalization. When clinicians begin to make

generalization and particularly, to impute inner determinants to the patient, they are moving directly to clinical interpretation as it is often used.

LEVEL III interpretations take clinicians beyond level II primarily by being more inclusive and better integrated. at this level, they attempt to achieve a consistent, broad understanding of the ‘individual in situation’, clinician will draw and integrated picture of the patient’s developmental, social, and psychological determinants that involves a highly articulated theoretical system of hypothesis and deductions. For example, a preponderance of ‘blood’ responses on the Rorschach might be interpreted as a sign of underlying aggression that may lead to future impulsive outbursts or loss of control.

THEORY AND INTERPRETATION

Currently, clinicians may be assigned to three very broad interpretive classes.

BEHAVIORAL CLINICIANS

First, there are the behavioral clinicians. The strict behaviorist avoids making inferences about underlying states and instead concentrates on *the* behavior of the patient. The behavioral clinician typically seeks patient data based on personal observation or on direct reports from the patient *or from the other* observers. These data are regarded as samples. Interpretation is Largely at Level I and II, although more recently some behavioral clinicians have begun to show an interest in Level III interpretation.

PSYCHOMETRIC APPROACH

A second group of clinicians pride themselves on being empirical and objective. In particular, these clinicians are likely to use objective [tests to](#) predict to relatively specific criteria. For example, will scores from tests A, B, and C predict success in college, therapy outcome, or aggressive out bursts? This *psychometric approach* to interpretation, as we shall see a bit later, is especially useful when the criteria being predicted are crisp and well articulated. In general, this approach uses data as correlates of something else—for example, a score at the 95th percentile on test X may be related to recidivism in prisoners. The psychometrically oriented clinician is most concerned with standardized tests and their norms, regression equations, or actuarial tables, and tends to employ Level I and II interpretation.

PSYCHODYNAMIC APPROACH

A third group of clinicians is more comfortable with *a psychodynamic approach*. This has long been a popular orientation in clinical psychology. Although current clinicians often seem to opt for a more objective behavioral or psychometric approach, there is still more of the psychodynamicist in many of them than they might like to admit. The psychodynamic approach strives to identify inner states or determinants. Data from projective tests, unstructured clinical interviews and other sources are viewed as signs of an underlying state. Interpretation tends to itched at Level III. A broad, often highly impressionistic picture of the patient is drawn, although in many instances subtle normative assertions are made.

QUANTITATIVE VERSUS SUBJECTIVE APPROACHES

Quietly embedded in the preceding discussion are two distinct approaches to clinical judgment and interpretation. First is the *quantitative or statistical approach*, which emphasizes objectivity and is presumably free from fuzzy thinking. Second is the *subjective or clinical approach*, which adherents claim is the only method to offer truly useful interpretations and predictions.

THE QUANTITATIVE STATISTICAL APPROACH

Perhaps the simplest form of quantitative prediction that clinicians can use involves assigning scores

to the various characteristics of their patients. This enables clinicians to determine the correlation between any two characteristics. For example, suppose that after several years of practice, a clinician begins to suspect a direct relationship between early termination of therapy and patients' needs for independence. The clinician might attempt to verify this hypothesis by correlating "need for independence" scores from a self-report inventory with the length of time that patients remain in therapy. Should the correlation turn out to be substantially above .50, the clinician could use need for independence scores to make interpretations and predictions regarding the duration of therapy.

Of course, more often than not, one cannot base important predictions on a single score or attribute. The conclusion of therapy is more often a complex event that has a number of determinants. Consequently, the clinician might want to obtain scores on several other variables, such as ego strength, the experience of the therapist, marital satisfaction, and interpersonal trust. A multivariate prediction model could then be constructed and tested. A particular caution to bear in mind, however, is that even though a multiple correlation from such an analysis may turn out to be quite high, it may well be much lower when applied to a new sample. This is especially true if the original sample is small and the number of predictors is large. Further, the sample on which the initial study is carried out may not be representative of therapy patients in general. What is true in Kansas may not be true in California; what is true for psychoanalytic therapy may not be true for behavior therapy. Therefore, clinicians have to be sure that they have correctly weighted various predictor scores before they can generalize very far. They must cross-validate their prediction models using other samples.

These statistical techniques permit a mechanical application that does not involve clinical decision making at all once the formulas have been established. The feature that distinguishes these statistical approaches from clinical approaches is that the former (no matter what their complex mathematical development), once established, can be routinely applied by a clerk or a computer.

The quantitative, statistical approach, then, requires that the clinician keep careful records of the data, observation and related material so that clinical interpretations and judgments can be quantified. Such careful record keeping will permit the clinician to go beyond informal impressions based on previous experience. With adequate records on large enough samples, the relations among a host of variables can be assessed. Whether clinicians are evaluating their own performance or the performance of an entire clinic, or are relating certain patient characteristics to various diagnostic or therapeutic outcomes, quantified data can play a facilitating role. Such data enable clinicians to evaluate their judgment, interpretations, and performance.

THE SUBJECTIVE CLINICAL APPROACH

The clinical approach is much more subjective, experiential, and intuitive. Here, subjective weights based on experience suffice. The emphasis is on the application of judgment to the individual case. The classical notation is that "clinical intuition" is not readily amenable to analysis and quantification. It is a private process in which clinicians themselves are sometimes unable to identify the cues in a patient's test responses or verbalizations that led them to a given conclusion or judgment.

Once, for example, in the course of a Rorschach administration, a patient said, "This looks like a Christmas tree." What did this mean? Perhaps nothing. Or perhaps it indicated a career in forestry. Or perhaps it suggested an underlying sadness or depression in a person with few friends or family with whom to enjoy the approaching holiday season. In this case, the last interpretation was later supported by the patient during a discussion of his family background. The clinical student who had made the correct interpretation in a training exercise explained her reasoning as follows: "It was near the Christmas season; there were several references in the TAT to remote family figures; I remembered how I always seem to become a little sad during Christmas; it suddenly popped into my head, and I just knew with complete certainty that it was true-it simply felt right!"

This example illustrates several things about clinical interpretation. First, such interpretation involves a sensitive capacity to integrate material. The astute clinical psychologist pays attention to the wide range of events that characterize the patient's behavior, history, other test responses, and so on. A clinician must function a bit like the detective who takes in everything at the scene of the crime and then makes a series of inductive or deductive generalizations that link these observations together. In addition, there is often a willingness in the clinician to see a bit of him or herself in the patient-----a kind of assumed similarity that enables the clinician to utilize his or her own experience in interpreting the behavior and feelings of another.

Unfortunately, the presentation of this example has been one-sided. Little has been made of the clinical student who believed that the Christmas tree suggested an interest in forestry. Therefore, we may make two additional observations. First, there are individual differences in clinical sensitivity. Second, for every instance of brilliant and sensitive clinical inference, there probably lurks in the unrecalled recesses of memory an equally impressive misinterpretation.

Clinical interpretation, then, involves the sensitive integration of many sources of data into a coherent picture of the patient. It also fulfills a hypothesis-generating function that is best of personality. But it behooves responsible clinicians to make every effort to articulate the cues involved in their judgments and to explicate the manner in which they make the leap from cues to conclusions. It is not enough to be good clinicians. There is also a responsibility to pass on these skills to others.

COMPARING CLINICAL AND ACTUARIAL APPROACHES

Over the years, many studies have compared the relative accuracy of clinical and actuarial methods. Let us now examine some of that work.

Comparison Studies

Sarbin (1943) contrasted the prediction of academic success of college freshmen made by a clerk employing a regression equation with the predictions made by several counselors. The regression equation predictors were aptitude test scores and high school rank. The counselors had available to them the two preceding sources of data (but without their mathematical weighting), vocational interest scores, interview data, and biographical data. Sarbin (1943) found that the counselors were no better than the regression equation in their predictions even though they had the benefit of much mere information.

Meehl (1954) surveyed a number of the studies available on clinical versus statistical, prediction and concluded that in "all but one ... the predictions made actuarially [statistically] were either approximately equal or superior to those made by a clinician". In a later survey of additional research, Meehl (1965) reaffirmed his earlier conclusions. However, Meehl (1954) also observed that, in several studies, statistical predictions were made on the same data from which the regression equations were developed. In short, the formulas were not cross-validated. Such formulas frequently show a marked reduction in efficiency when they are applied to samples different from those used in their derivation.

Sawyer (1966) regarded data collected by interview or observation as clinical data. He viewed inventory, biographical, or clerically obtained data as statistical or mechanical. Having considered the methodological problems and the equivocal results of the studies he examined, Sawyer concluded that in combining data the mechanical mode is superior to the clinical mode. However, he also concluded that the clinical method is useful in the data collection process. The clinical method can provide an assessment of characteristics that would not normally be assessed by more mechanical techniques of data collection. But once the data (from whatever source) are collected, they can best be combined by statistical approaches.

An example of an individual study comparing clinical and statistical prediction may help further illustrate the nature of this controversy.

One of the most frequently cited studies of clinical versus statistical prediction was reported by Goldberg(1965) .in this study, 13 PhD level staff members and 16 predoctoral trainees were asked to make judgments regarding the diagnostic status of more than 800 patients, based on these patients' MMPI scores. These judgments were made without any contact with the patient or any additional information on the patient. Each judge simply examined the MMPI profile (scores) for each patient and then predicted whether the patient was "psychotic" or "neurotic." These judgments constituted clinical predictions because it was left up to each judge as to how she or he used the MMPI information to formulate a diagnosis.

In contrast, statistical predictions involved the application of a variety of algorithms, in which MMPI scale scores were combined (added or subtracted), in some manner and previously established cutoff scores for psychosis versus neurosis were used. In addition, some statistical predictions involved the application of specified decision rules based on MMMPI high point codes or other psychometric signs. A total of 65 different quantitatively based rules were considered.

What were these clinical and statistical predictions compared to in order to assess their accuracy? In this study, the criterion diagnosis was the psychotic versus neurotic diagnosis provided by each patient's hospital or clinic. Thus, the accuracy of each clinician's and each statistical algorithm's prediction was determined by assessing the agreement between predictions and the actual criterion diagnoses across all cases.

A variety of additional, updated reviews of the studies pitting clinical versus statistical prediction have uniformly-demonstrated the superiority of statistical procedures (for example, Dawes, 1979, 1994; Dawes, Faust, & Meehl, 1989; Garb, 1998; Goldberg, 1991; Kleinmuntz, 1990; Meehl, 1986; Wiggins, 1973). As stated by Meehl (1986):

Objections to These Findings

Dawes (1994) has outlined several of the major objections to large body of evidence supporting the superiority of statistical prediction, along with response, such objection.

First, critics argue that several of the individual studies reviewed contained research design flaws that may have affected the findings. Dawes (1994) refers to this an "argument from a vacuum"-a possibility is raised, but there is no empirical demonstration supporting the possibility. Although every study has its limitations, it is difficult to imagine that the opposite conclusion (clinical prediction is superior) is warranted when practically all of the studies support statistical prediction.

The second objection concerns the expertise of the judges/clinicians in these studies. Perhaps they were not "true" experts, and a study employing expert clinicians would demonstrate the superiority of clinical judgment. Although a wide variety of judges/clinicians were used in these studies, a number of studies employed recognized "experts"-clinicians with many years of experience performing the predictive task in question. There were a few instances in which an individual clinician performed as well as the statistical formula, but this was more the exception than the rule. Thus, there is no compelling empirical evidence that "expert" clinicians are superior.

A third objection is that the predictive tasks were not representative of prediction situations facing clinicians (that is, not ecologically valid). A clinician's diagnosis may not be based only on the MMPI-2, for example, but also on an interview with the patient. Dawes (1994) argues, however, that the predictive tasks are components of what may go on in clinical practice clinicians purportedly use the MMPI-2 information to make predictions. Further, several of the studies demonstrate that additional information (such as interview material) obtained and used in the judge's clinical prediction may actually

result in less accurate predictions than would be the case if the clinician had simply "stuck with the statistical formula that was available.

Dawes (1994) goes on to suggest that much of the negative reaction to the findings is a function of our human need to believe in a high degree of predictability in the world. This appears to be both a cognitive and an emotional need. People have a built-in tendency to both seek and see order in the world, and a lack of predictability in the world is likely to result in some degree of discomfort or emotional distress. However, the need for predictability does not prove its existence.

BIAS IN CLINICAL JUDGMENT

Clinical judgment suffers when bias of any kind intrudes into the decision-making process. Bias exists when accuracy of clinical judgment or prediction varies as a function of some client or patient characteristic, not simply when judgments differ according to client characteristics (Garb, 1997, 1998). For example, finding that a higher percentage of women than men are judged to suffer from major depression would not indicate a bias against women. However, finding that a higher percentage of women than men are given this diagnosis when the same symptoms are presented would indicate bias.

Garb (1997) recently reviewed the empirical evidence for race bias, social class bias, and gender bias in clinical judgment. Interestingly, he found that many conventionally held beliefs about these types of bias were not supported. For example, there was little support for the beliefs that

- (1) lower-socioeconomic-class patients are judged to be more seriously disturbed than those from higher socioeconomic classes or
- (2) Women patients are judged to be more disturbed or dysfunctional than men patients. However, there was strong evidence to support the existence of several other types of biases:
 1. Black and Hispanic patients who have psychotic mood disorders are more likely to be misdiagnosed with schizophrenia than are similar White patients.
 2. Even when presenting the same constellation of symptoms, men are more likely to be diagnosed as antisocial and women are more likely to be diagnosed as histrionic.
 3. Middle-class patients are more likely to be referred for psychotherapy than lower-class patients.
 4. Black patients are more likely to be prescribed antipsychotic medications than members of other racial groups, even when the Black patients are not more psychotic.

Garb (1997) made the following recommendations to help clinicians overcome these and other bias

- (1) Be aware of and sensitive to the biases that have been documented in the literature.
- (2) Attend to the diagnostic criteria in diagnostic manuals.
- (3) Whenever possible, use statistical prediction rules instead of clinical judgment or prediction

EXPERIENCE AND TRAINING

To date, empirical evidence does not support the position that increased clinical experience results in increased accuracy in prediction (Dawes, 1994; Garb, 1989, 1998). This seems to fly in the face of conventional wisdom. Why is it that we do not see evidence for the effect of clinical experience in clinical psychology and other mental health fields? There are several possibilities (Dawes, 1994).

First, the accuracy of predictions is limited by the available measures and methods that are used as aids

in the prediction process. If scores from psychological tests, for example, are not strongly correlated with the criterion of interest (that is, highly valid), then it is unlikely one could ever observe an effect for clinical experience. The accuracy of predictions will remain modest at best and will not depend on how "clinically experienced" the clinician is.

Second, we often cannot define precisely what we are trying to predict (for example, "abusive personality"), and no gold standards for our criteria exist to enable us to assess objectively the accuracy of our predictions. As a result, true feedback is impossible, and diagnosticians are not able to profit from experience.

Third, we tend to remember our accurate predictions and to forget our inaccurate ones. Therefore, more experience in the prediction process does not necessarily lead to increased accuracy because the feedback that is incorporated is incomplete.

As for the virtue of receiving specific types of professional training, there is not much evidence to suggest that one profession is superior to another in making accurate diagnostic judgments. For example, even in differentiating psychological symptoms that are masking medical disorders from those without underlying medical disorders, medical and non medical practitioners did not differ in their accuracy (Sanchez & Kahn, 1991).

All of this research is somewhat sobering for the field of clinical psychology. However, it is our professional responsibility to be aware of the limits of our predictive ability and not to promote the "myth of experience." One thing is sure. Clinicians will continue to make decisions—they have no choice. The important thing is to ensure that clinical psychologists are as well prepared as they can be, as well as to train clinical psychologists to use the-best available measures and techniques for a given prediction situation.

CONCLUSION

Given the current state of affairs, the following conclusions regarding the relative strengths of clinical and actuarial methods seem warranted.

The **clinical approach** is especially valuable when:

1. **Information is needed** about areas or events for which no adequate tests are available. In this case, the research fails to offer any evidence that the data-gathering function of the clinician can be replaced by a machine.
2. **Rare, unusual events** of a highly individualized nature are to be predicted' or judged. Regression equations or other formulas cannot be developed to handle such events, and clinical judgment is the only recourse.
3. **The clinical judgments** involve instances for which no statistical equations have been developed. The vast majority of instances, in effect, fall into this category. The day-to-day decisions of the clinician are such that the availability of a useful equation would itself be a one and unusual event.
4. **The role of unforeseen** circumstances could negate the efficiency of a formula. For example, a formula might very easily outstrip the performance of a clinician in predicting suitability for hospital discharge. In the role of data gatherer, however, the clinician might unearth important data from a patient that would negate an otherwise perfectly logical statistical prediction.

The **statistical approach** is especially valuable when:

1. **The outcome to be predicted** is objective and specific. For example, the statistical approach will be especially effective in predicting grades, successful discharge, vocational success, and similar objective outcomes.
2. **The outcomes for large**, heterogeneous samples are involved, and interest in the individual case is minimal. Having a statistical formula to predict how many of 50,000 men will receive dishonorable discharges from the Army will be highly useful to the Army, though less so for the clinician who is dealing with Private Smith.
3. **There is reason to be particularly** concerned about human judgmental error or bias. Fatigue, boredom, bias, and a host of other human failings can be responsible for clinical error. Often, such effects are random and unpredictable. Formulas, equations, and computers never become tired, bored, or biased.

METHODS OF IMPROVING INTERPRETATION AND JUDGMENT

There are variety of factors that can reduce the efficiency and validity of clinical predictions and interpretation. One cannot presume to lay down a series of prescriptions that will lead inevitably to perfect performance. Let us, however, call attention to several factors that are important to keep in mind as one move from data to interpretation to prediction. Although the performance of clinicians has not been good, there are ways of making improvements (Faust, 1986; Garb, 1998).

INFORMATION PROCESSING

As clinicians process assessment information, they are often bombarded with tremendous amounts of data. In many instances, this information can be difficult to integrate because of its volume and complexity. Clinicians must guard against the tendency to oversimplify. It is easy for them to overreact to a few "eye-catching" bits of information and to ignore other data that do not fit into the picture they are trying to paint. Whether the pressure comes from an overload of information or from a need to be consistent in inferences about the patient, clinicians must be able to tolerate the ambiguity and complexity that arise from patients who are inherently complex.

THE READING-IN SYNDROME

Clinicians sometimes tend to over interpret. They often inject meaning into remarks and actions that are best regarded as less than deeply meaningful. Because clinicians are set to make such observations, they can easily react to minimal cues as evidence of psychopathology. What is really amazing is that the world gets along with 'so many "sick" people out there. It is so easy to emphasize the negative rather than the positive that clinicians can readily make dire predictions or interpretation` that fail to take the person's assets into account. Garb (1998) points out that clinicians who do evaluate clients' strengths and assets in addition to assessing pathology and dysfunction are less likely to pronounce clients as maladjusted or impaired.

VALIDATION AND RECORDS

Too often, clinicians make interpretations or predictions without following them up. *if* clinicians fail to record interpretations and predictions, it becomes too easy to remember only the correct ones. Taking pains to compare the clinician's view with that of professional colleagues, relatives, or others who know the patient can also help to refine interpretive skills.

VAGUE REPORTS, CONCEPTS, AND CRITERIA

One of the most pervasive obstacles to valid clinical judgment is the tendency to use vague concepts and poorly defined criteria. This *process*; of course culminates in psychological reports that are equally vague. Under these conditions, it can be very difficult to determine whether clinicians' predictions and judgments were correct (which may be why some of them use such shadowy terminology!). To combat this problem, Garb (1998) recommends that clinicians use structured rating scales, objective personality tests, and behavioral assessment methods to form their clinical judgment and predictions.

THE EFFECTS OF PREDICTION

Sometimes predictions turn out to be in error not because they were based on faulty inferences but because the predictions themselves influenced the behavioral situation. For example, a prediction that a patient would have difficulty adjusting at home after release from the hospital may have been correct. However, the Patient's relatives may have accepted the prediction as a challenge and therefore provided an environment that was more conducive to the patient's adjustment than it would have been in the

absence of the prediction. Thus, the very act of having made a judgment may serve to alter the clinician's own behavior or that of others.

PREDICTION TO UNKNOWN SITUATIONS

Clinical inferences and predictions are likely to be in error when clinicians are not clear about the situations to which they are predicting. Inferring aggression from the TAT is one thing; relating it to specific situations is another. Furthermore, no matter how careful and correct clinicians are, an extraneous event can negate an otherwise perfectly valid prediction. Take the following example from the OSS assessment program:

One high-ranking OSS officer while operating abroad, received a letter from a friend of his in America informing him that his-wife had run off with the local garage man, leaving no message or address. As a result the officer's morale, which had formerly been high, dropped to zero. The assessment staff could predict that a small percentage of men would have to cope with a profoundly depressing or disquieting event of this sort, but, again, it was not possible to guess which of the assesses would be thus afflicted.

Common sense should suggest that to accurately predict a person's behavior, the clinician must consider the environment in which that behavior will take place this is also a tenet of behavioral assessment. However, clinicians are frequently asked to make predictions based on only imprecise and vague information regarding the situation in which their patient will be living or working.

In a hospital setting, a clinician may be requested to provide a prerelease workup on a given psychiatric patient. But the information available to the clinician will too often cover only general background, with supplementary descriptions of individual differences. Investigators such as Chase (1975), Ekehammar (1974), Megargee (1970), Mischel (1968), and Moos (1975) all agree that such data are subject to a ceiling effect that will allow correlations of no better than .30 to .40 between the data and subsequent behavior. To say the least, correlation of that magnitude leaves a great deal to be desired. Therefore, personality data alone are likely to be insufficient in many prediction situations.

FALLACIOUS PREDICTION PRINCIPLES

In some instances, intuitive predictions can lead clinicians into error because they ignore the logic of statistical prediction. Intuitive predictions often ignore base rates, fail to consider regression effects, and assume that highly correlated predictors will yield higher validity (Garb, 1998; Kahneman & Tversky, 1973). For example, suppose that a clinician is assessing a patient by collecting samples of behavior in a variety of situations. Even though observations reveal an extremely aggressive person, the clinician should not be *surprised* to learn that eventually the person behaves in a non aggressive fashion. Regression concepts should lead one to expect that exceptionally tall parents will have a shorter child that brilliant students sometimes do poorly, and so on.

In addition, clinicians' own confidence can sometimes be misleading. For example, Kahneman and Tversky (1973) showed that individuals are more confident when they are predicting from correlated tests. More specifically, although clinicians are often more confident of their inferences when they stem from a combination of the Rorschach, the TAT, and the MMPI rather than from a single test, tit. Golden (1964) could find no evidence to support this confidence. The reliability and validity of clinical interpretations did not increase as a function of increasing amounts of test data. One should always seek to corroborate one's inferences, but it would be a mistake to believe that the validity of inferences is inevitably correlated with the size of the test battery.

THE INFLUENCE OF STEREOTYPED BELIEFS

Sometimes clinicians seem to interpret data in terms of *stereotyped beliefs* (Chapman & Chapman, 1967). For example, Golding and Rorer (1972) found that *certain clinicians* believed that anal responses on the Rorschach indicated homosexuality; and they were extremely resistant to changing their preconceptions even in the face of intensive training to the contrary. Such research is a reminder that clinicians must constantly be on guard against any tendency to believe that certain diagnostic signs are inevitably valid indicators of certain characteristics.

Another example comes from a survey of the effects of clients' socioeconomic status on clinicians' judgments (Sutton & Kessler, 1986). A sample of 242 respondents read case histories identical in all respects except that the client was placed in different socioeconomic classes. When the client was described as an unemployed welfare recipient with a seventh-grade education, clinicians predicted a poorer prognosis and were less likely to recommend insight therapy.

"WHY I DO NOT ATTEND CASE CONFERENCES"

In an engaging paper, Meehl (1977) lists a variety of reasons why he gave up attending case conferences. He catalogs a number of fallacies that often surface at such meetings. Most of them are entirely relevant to the interpretive process generally. The following synopsis of a few of Meehl's examples provides something of their general flavor:

- **Sick-sick fallacy:** the tendency to perceive people very unlike ourselves as being sick. There is a tendency to interpret behavior very unlike our own as maladjusted, and it is easier to see pathology in such clients.
- **Me-too fallacy:** denying the diagnostic significance of an event in the patient's life because it has also happened to us. Some of us are narcissistic or defensive enough to believe we are paragons of mental health. Therefore, the more our patients are like ourselves; the less likely we are to detect problems.
- **Uncle George's pancakes fallacy:** "There is nothing wrong with that; my Uncle George did not like to throw away leftover pancakes either." This is perhaps an extension of the previous fallacy. Things that we do (and by extension, things that those close to us do) could not be maladjusted; therefore, those like us cannot be maladjusted either.
- **Multiple Napoleons fallacy:** There was only one Napoleon, despite how strongly a psychotic patient may feel that he or she is also Napoleon. An objection to interpreting such a patient's belief as pathological is buttressed by the remark, "Well, it may not be real to us, but it's real to him (or her)!" Further, "Everything is real to the person doing the perceiving. In fact, our percepts are our reality." If this argument were invoked consistently, nothing could possibly be pathological. Even the patient with paranoid schizophrenia who believes aliens are living in his nasal passages would be normal since; after all, this is reality for him.
- **Understanding it makes it normal fallacy:** *the* idea that understanding a patient's beliefs or behaviors strips them of their significance. This trap is very easy for clinicians to fall into. Even the most deviant and curious behavior can somehow begin to seem acceptable once we convince ourselves that we know the reasons for its occurrence. This may not be unlike the reasoning of those who excuse the criminal's behavior because they understand the motives and poor childhood experiences involved.

CONCLUSION

There are number of recommendations to improve the reliability and validity of clinical judgment.

- 1) Consider all available information and do not ignore inconsistent data.
- 2) Consider clients' or patients' strengths and assets as well as pathology and dysfunction.
- 3) Documents all predictions, try to evaluate their accuracy, and use this information as feedback.
- 4) Use only structured interviews, structured rating scales, objective personality tests, and behavioral assessment methods to gather data.
- 5) Consider the client's situation and environment before making predictions.
- 6) Consider base rates and regression effects.
- 7) Do not let one's level of confidence influence prediction.
- 8) Be ware of and guard against stereotyped beliefs and illusory correlation.

THE CLINICAL REPORT WRITING: AN EFFECTIVE CLINICAL REPORT

COMMUNICATION: THE CLINICAL REPORT

After the clinician has completed the interview, administered the tests, and read the case history. The tests have been scored, and hypotheses and impressions have been developed. The time has come to write the report. This is the communication phase of the assessment process.

Appelbaum (1970) has characterized the role of the assessor as sociologist, politician, diplomat, group dynamicist, salesperson, artist, and yes, even psychologist. As a sociologist, the assessor must assay the local mores to aid in the acceptance of the report and to direct the report to those most likely to implement it. In some instances, this may mean interacting directly with hospital personnel to convince them of the validity of the report and to encourage them to act on it. These interactions may involve ward attendants, nurses, psychiatrists, and others. Such persuasion may at times seem more suitable for a politician or a diplomat than for a clinician.

One should not accept the role of clinical huckster. However, there are certainly times when reports will have to serve the function of convincing reluctant others. Not everyone is willing to regard the clinician as a purveyor of wisdom and unadulterated truth. Ideally, of course, the evidence for clinicians' conclusions and the tightness of their arguments will be reasons enough for accepting their descriptions and recommendations.

There is no single "best format" for a report. The nature of the referral, the audience to which the report is directed, the kinds of assessment procedures used, and the theoretical persuasion of the clinician are just a few of the considerations that may affect the presentation of a clinical report. What one says to a psychiatrist is likely to be couched in language different from that directed to a school official. The feedback provided to the parents of a mentally retarded child must be presented differently from the feedback given to a professional colleague. Given below is a sample outline of a psychological test report (Beutler, 1995).

1. Identifying question

- a. Name of patient
- b. Sex
- c. Age
- d. Ethnicity / Class
- e. Date of evaluation
- f. Referring clinician

2. Referral question**3. Assessment procedures****4. Background**

- a. Information relevant to clarifying the referral question.
- b. A statement of the probable reliability/validity of conclusion.

5. Summary of impressions and findings

- a. Cognitive level
 - Patient's intellectual and cognitive functioning (ideation, intelligence, memory, perception)
 - Degree (amount of impairment) compared to premorbid level.
 - Probable cause of impairment.
- b. Affective and mood levels
 - Mood, affect at present---compare with premorbid levels.
 - Degree of disturbance (mild, moderate, severe).
 - Chronic versus acute nature of disturbance.
 - Lability—how well can the person modulate, control affects with his/her cognitive resources?
- c. Interpersonal-intrapersonal level
 - Primary interpersonal and interpersonal conflicts and their significance.
 - Interpersonal and intrapersonal coping strategies.
 - Formulation of personality.

6. Diagnostic-interpersonal levels

- a. Series of impressions about cognitive and affective functioning, or
- b. The most probable diagnosis.

7. Recommendations

- a. Assessment of risk, need for confinement, medication.
- b. Duration, modality, frequency of treatment.

The major responsibility of the report is to address the *referral question*. The test report should carefully and explicitly answer the questions that prompted the assessment in the first place. If the referral questions cannot be answered or if they are somehow inappropriate, this should be stated in the report and the reasons given for this judgment. In some (perhaps most) instances, contradictions will be inherent in the assessment data. Although the clinician must make every effort to resolve such contradictions and present a unified view of the patient, there are instances in which such resolution is not possible. In those instances, the contradictions should be described. Distortion in the service of consistency is not a desirable alternative.

There are often secondary readers of clinical reports for example, although the primary report may be sent to the referring person (a psychiatrist, another clinician, or an agency), a secondary reader may be an agency administrator, ad program evaluator, or a research psychologist. In specific circumstances it may be necessary or even desirable to prepare a special report for such people. In any event, a clinical report does not always serve an exclusively clinical or direct helping function. It can also be useful in assisting an agency to evaluate the effect of its programs. It can likewise be useful from the standpoint of psychological research. Information in clinical reports can often be helpful in validating tests or the interpretations and predictions made from tests. Such data can sometimes provide a baseline against which to compare subsequent change in the patient as a function of various forms of intervention.

AIDS TO COMMUNICATION

The function of a report is communication. The following are some suggestions for enhancing that function.

Language

One should not resort to jargon or to a boring and detailed test-by-test account of patient responses. Again, it is important to recall the nature of the referral source. In general, it is probably best to write in a style and language that can be understood by the intelligent layperson. Of course, what is jargon or excessively technical is partly in the eye of the beholder. A considerable amount of technical language can be tolerated in a report sent to professional colleagues whom one knows. On the other hand, technical jargon has no place in a report that is going to a parent. The terms *interest scatter* and *Erlebnistypus* may be all right for another clinician, but they should not appear in a report sent to a junior high school counselor.

Individualized Reports

We know the importance of avoiding the Barnum effect (a term applied in case where statements that appears to be valid self-descriptions in actually characterize almost everybody).The distinctive (be it current characteristics, development, or learning history) is preferred over the general. To say "Jack is insecure" hardly distinguishes him from 90% of all psychotherapy patients. To say that Jack's insecurity stems from a history of living with several different relatives as a child and that it will become particularly acute Whenever he must make a decision that will make him away (even temporally) from the home-is considerably more meaningful. In this case, a general characteristic has been distinctly qualified by both antecedent and subsequent conditions.

The Level of Detail

The question often arises as to how detailed a report ought to be. Again, the answer depends largely on the audience. In general, however, it seems desirable to include a mix of abstract generalities, specific behavioral illustrations, and some testing detail. For example, in reporting depressive tendencies, a few illustrations of the test responses that led to the inference would be in order. A few of the relevant behavioral observations that were made during testing could also be quite helpful. A certain amount of detail can give readers the feeling that they can evaluate the clinician's conclusions and interpretations.

The exclusive use of abstract generalities places the reader at the mercy of the author's inferential processes.

CONCLUSION

The clinical report serves as the major form of communication to convey the findings from a clinician's assessment and evaluation. The report should address the referral questions, using language that is tailored to the person or persons who will be reading the report. Finally, the report should contain information that is detailed and specific to the client and should avoid vague, Barnum like statements.

PSYCHOLOGICAL INTERVENTIONS AND THEIR GOALS

DEFINING THE INTERVENTION

In a most general way, psychological intervention is a method of inducing changes in a person's behavior, thoughts, or feelings.

Although the same might also be said for a TV commercial or the efforts of teachers and close friends, psychotherapy involves intervention in the context of a professional relationship-a relationship sought by the client or the client's guardians. In some cases, therapy is undertaken to solve a specific problem or to improve the individual's capacity to deal with existing behaviors, feelings, or thoughts that are debilitating. In other cases, the focus may be more on the prevention of problems than on remedying an existing condition. In still other instances, the focus is lesson solving or preventing problems than it is on increasing the person's ability to take pleasure in life or to achieve some latent potential.

Psychologists are involved in *intervention* whenever they purposefully try to produce change in the lives of others. We will consider three types of interventions that are intended to produce change in people's lives.

First, there has been a recent emphasis in clinical psychology (and, indeed, in psychology in general) on "positive psychology," including the *promotion* of health and positive behaviors. This approach typically targets broad populations and is exemplified by programs that teach for example, stress management, exercise and healthy eating, and social competence skills.

Second, programs designed to *prevent* psychopathology and diseases have a longer history. These programs typically target groups who are at elevated risk for developing disorder (e.g., low weight infants, children of depressed mothers, victims of assault) and are designed to reduce the probability of adverse outcomes in these samples.

Third, the most common form of intervention in clinical psychology is psychotherapy. The process used to *treat* various types of disorders once they have occurred. Many different forms of psychotherapy have been developed to treat depression, anxiety, personality disorders, and other psychological problems.

GOALS OF PSYCHOLOGICAL INTERVENTION

Interventions carried out by clinical psychologists have a remarkably wide range of goals and take a variety of different forms. Psychological interventions have been developed to change behaviors in order to reduce the risk for AIDS, prevent violent behavior. Promote healthy patterns of diet and exercise, improve children's learning and performance in school, control alcohol abuse, treat the victims of trauma, manage problems of inattention and aggression in children, alleviate major depression, and prolong the lives of patients with serious illness. These are only a few examples of the wide range of psychological interventions that have been developed within the realm of clinical psychology and other mental health professions.

WHAT ARE WE TRYING TO CHANGE?

Psychological interventions differ in the aspects of human functioning that they are designed to change. Just as psychologists can choose to assess and measure thoughts, feelings, behavior, biology, or the environment, so too can psychologists help people change in one or more of these various levels of functioning (Kanfer & Goldstein, 1991). Some interventions are intended to change what people do, to change particular problem *behaviors*. For example, an intervention may be designed to reduce the

amount and frequency of the consumption of alcohol or cigarette smoking. Other interventions are designed to change *emotions* by decreasing emotional distress and increasing emotional comfort, as when an intervention is used to reduce feelings of anxiety and worry. Still other interventions are intended to change the ways that people *think*; for example, to stop persistent thoughts about a traumatic experience or to help individuals develop more positive and optimistic beliefs about the future. Psychological interventions also may be designed to change underlying *biological processes*. Examples include the use of psychological techniques to reduce blood pressure, lower resting heart rate, or decrease headache pain. Finally, interventions can be designed to change the *environment* rather than the person, such as changing the structure and resources of a junior high or middle school to ease the often stressful transition of students from the primary grades. Most interventions are, in fact, designed to produce change in more than one of these levels of functioning.

Much of the work carried out by clinical psychologists is concerned with the prevention or treatment of specific forms of psychopathology as defined in the DSM-IV but clinical psychological interventions are also concerned with broader social problems and problems in living that are not included as specific diagnostic categories in the DSM-IV (Adelman, 1995). These include problems in learning and development, difficulties in daily living, and problems in interpersonal relationships. Furthermore, advances in clinical health psychology and behavioral medicine have expanded the focus of interventions in clinical psychology to include a number of physical disorders and diseases—psychologists contribute directly to the prevention and treatment of, among other diseases, cancer, diabetes, hypertension, and AIDS.

The goals of an intervention may not be the same for all parties involved. For example, the parents and the teachers of an adolescent boy who is referred for treatment of disruptive behavior and conduct problems may not share the same goals for improving his behavior. The adolescent may have radically different goals than either his parents or his teachers, or he may not wish to change at all. Similarly, a client may have different goals from those that are formulated by a psychologist. A framework for understanding differences in goals for intervention has been outlined by psychologist Hans Strupp. Strupp's tripartite model distinguishes among the criteria for successful interventions that are held by clients, society, and mental health professionals. Clients are typically concerned with achieving change in their subjective sense of distress. Alternatively, society is most often concerned with interceptions that bring change in disruptive or harmful behavior. Finally, mental health professionals are concerned with change that can be evaluated according to criteria that are specified as part of a model of personality or psychopathology. Therefore, the goals of interventions and the evaluation of success in achieving these goals involve the measurement of different perspectives and frequently use different criteria of success.

INTERVENTION AND PSYCHOTHERAPY

As often as not, the terms intervention and psychotherapy have been used interchangeably. A rather typical general definition of psychotherapy was provided years ago by Wolberg (1967):

“Psychotherapy is a form of treatment for problems of an emotional nature in which a trained person deliberately establishes a professional relationship with a patient with the object of removing, modifying or retarding existing symptoms, of mediating disturbed patterns of behavior, and of promoting positive personality growth and development.”

Wolberg's definition includes such words as symptoms and treatment, and his subsequent elaboration of the definition gives it a distinctly medical flavor. Yet, overall, the definition is not much different from one offered by a more psychologically oriented clinician (Rotter, 1971)

“Psychotherapy ... is planned activity of the psychologist, the purpose of which is to accomplish changes in the individual that make his [sic] life adjustment potentially happier, more constructive, or both.”

J. D. Frank (1982) elaborates this general theme as follows:

Before we describe in more detail the goals and features of psychotherapy, a general question needs to be addressed. Does psychotherapy work? Both advocates (for example, Lambert & Bergin, 1994) and critics (for example, Dawes, 1994) agree that empirical evidence supports the efficacy of psychotherapy. Of course, this does not mean that everyone benefits from psychotherapy. Rather, on average, individuals who seek out and receive psychotherapy achieve some degree of relief. For example, a frequently cited meta-analytic review of more than 475 psychotherapy outcome studies reported that the *average* person receiving psychological treatment is functioning better than 80% of those not receiving treatment (Smith, Glass, & Miller, 1980). At this point, a recent large-scale survey on the benefits of psychotherapy deserves mention. The November 1995 issue of *Consumer Reports* ("Mental Health," 1995) summarized the results of a survey of 4,000 readers who had sought treatment for a psychological problem from a mental health professional, family doctor, or self-help group during the year's 1991-1994. Most of the respondents were well educated, their median age was 46 years, and about half were women. Of this sample, 43% described their emotional state at the time that treatment was sought as "very poor" ("I barely managed to deal with things") or "fairly poor" ("Life was usually pretty tough"). The 4,000 respondents presented for treatment of a wide range of problems, including depression, anxiety, panic, phobias, marital or sexual problems, alcohol or drug problems, and problems with children. The major findings were as follows:

1. Psychotherapy resulted in some improvement for the majority of respondents. Those who felt the worst before treatment began reported the most improvement.
2. As for which types of mental health professionals were most helpful, psychiatrists, psychologists, and social workers all received high marks. All appeared to be equally effective even after controlling for severity and type of psychological problem.
3. Respondents who received psychotherapy alone improved as much as those who received psychotherapy plus medication as part of their treatment.
4. In this survey, longer treatment (more sessions) was related to more improvement.

These findings are both interesting and provocative. This survey, however, is limited in a number of respects such that we must be cautious in our generalizations. For example, few respondents reported severe psychopathology (such as schizophrenia), and reports were both retrospective and based solely on the clients' self-reports. In addition, the percentage of potential respondents who returned the survey was relatively low, raising the possibility of an unrepresentative sample. Further, readers of this publication may not be particularly representative of the general U.S. population. Despite these limitations, the *Consumer Reports* survey provides some support for the contention that psychotherapy works. Further, it represents the largest study to date that has assessed "the effectiveness of psychotherapy as it is actually performed in the field with the population that actually seeks it, and it is the most extensive, carefully done study to do this.

FEATURES COMMON TO MANY THERAPIES

The apparent diversity among psychotherapies can sometimes lead us to overlook the marked similarities among them. One reason is that the purveyor of a new brand of psychotherapy must emphasize the special features of the new product. Bringing forth a minor variation of an old therapeutic theme would be unlikely to capture anyone's interest. Yet most psychotherapy has a great deal in common—a commonality that in many respects outweighs the diversity.

Hundreds of "brands" of psychotherapy have been identified. Some are effective, whereas others probably are not. Unfortunately, not all of these forms of psychological intervention have been subjected to empirical scrutiny. Of those that have received research attention, however, there is only limited evidence that one approach or technique is more effective than others. As Lambert and Bergin (1994) note, one implication of therapeutic equivalence is that the positive changes effected by psychological treatment may actually be the result of a set of *common factors* that cuts across various theoretical and therapeutic boundaries. Lambert and Bergin (1994) provide a list of common factors categorized according to a sequential process that they believe is associated with positive outcome.

Briefly, they propose that *supportive factors* (for example, positive relationship, trust) lay the groundwork for changes in clients' beliefs and attitudes (*learning factors*-for example, cognitive learning, insight), which then lead to behavioral change (*action factors*-for example, mastery, taking risks). Some of the factors are discussed below.

THE EXPERT ROLE

It is assumed that the therapist brings to the therapy situation something more than acceptance, warmth, respect, and interest. These personal qualities are not sufficient for certification as a clinical psychologist. Conventional wisdom seems to suggest that all one needs in order to conduct psychotherapy is an unflinching interest in others. In fact, however, this is not enough.

In all forms of psychotherapy, patients have a right to expect that they are seeing not only a warm human being but a competent one as well. Competence can only come from a long, arduous period of training. Some may be quick to reply that the assumption of an *expert role* introduces an authoritarian element into the relationship, implying that the patient and the therapist are not equal, and thus destroying the mutual respect that should exist between them. However, mutual understanding and mutual acceptance of the different roles to be played would seem sufficient to guarantee the maintenance of mutual respect. Therapists are, of course, no better than patients, and they cannot lay claim to any superior consideration in the cosmic scheme of things. However, this kind of equality need not deny the importance of training, knowledge, and experience that will assist therapists in their efforts to resolve the patient's problems.

THE RELEASE OF EMOTIONS/CATHARSIS

Some have stated that psychotherapy without anger, anxiety, or tears is no psychotherapy at all. Psychotherapy is an emotional experience. The conviction of most psychotherapists is so strong on this point that they would seriously question whether a patient who, session after session, maintains a calm, cool, detached or intellectual demeanor is really benefiting. The problems that bring a person to psychotherapy are typically important ones. Consequently, they are likely to have important antecedents.

The release of emotions, or *catharsis* as it is sometimes termed, is a vital part of most psychotherapies. Its depth and intensity will vary, depending on the nature and severity of the problem and on the particular stage in therapy. But the psychotherapist must be prepared to deal with emotional expression and to use it to bring about change. Although some forms of psychotherapy certainly place more reliance on emotional expression than do others, a new brand of therapy is likely to be criticized if it seems to neglect this important facet. On the other hand, there are clearly some forms of psychotherapy (such as anger management) in which catharsis are not likely to be a desirable goal. In these cases, the goal may be to gain better control over the expression of one's emotions.

RELATIONSHIP/THERAPEUTIC ALLIANCE

For some, the nature of the relationship *or, therapeutic alliance* between patient and therapist is the single element most responsible for the success of psychotherapy. Although not all therapists would elevate the relationship to the status of the primary, "curative" agent, almost all therapists would attest to the unique importance of the relationship. Where else can patients find an accepting, non-

judgmental atmosphere in which to discuss their innermost urges, secrets, and disappointments? Discussions of this kind with a friend or relative always seem to contain an implicit aura of evaluation and often lead to unforeseen complications because the other person has a personal stake in the matters discussed. Friends can easily be threatened by such discussions because the content of the discussions has the potential to disturb the basis for the relationship. Can a husband discuss his dependency anxieties with his wife, whose perception of her role may be disturbed by such revelations? Can a son reveal his fear of failure to a father who has been boastful of the son's achievements? Can a daughter tell her mother that she wants to give up her role as housewife in favor of a career without seeming to question her mother's values?

In *psychotherapy*, all of this is possible. The effective therapist is someone who can be accepting, nonjudgmental, objective, insightful, and professional all at the same time. These lavish adjectives scarcely fit all therapists all of the time. Nevertheless, the general ability of therapists to rise above their personal needs and to respond with professional skill in a nonjudgmental atmosphere of confidentiality, understanding, and warmth is probably a major reason for the success and persistence of psychotherapy in our society.

ANXIETY REDUCTION/RELEASE OF TENSION

Initially, it is important that the anxiety accompanying the patient's problems in living be reduced enough to permit examination of the factors responsible for the problems. The essential conditions of psychotherapy—including the nature of the relationship, the qualifications of the therapist, confidentiality, and privacy—combine to provide a reassurance and a sense of security that can lower the patient's anxiety and permit the patient to contemplate his or her experiences systematically.

In instances in which the anxiety level is extremely high, some patients may require, on medical advice, antianxiety medications to help deal with the situation. However, it is important that such medications be regarded as a temporary tool rather than a permanent solution. Some clients may experience side effects to medications, and medications may actually interfere with some forms of psychological treatment (such as exposure-based therapies) in which the goal is to increase anxiety levels in the face of certain stimuli so that habituation will occur.

INTERPRETATION/INSIGHT

Many nonprofessionals erroneously view psychotherapy as a rather straightforward process in which a person presents a problem, the therapist asks the person to describe his or her childhood experiences, the therapist offers a series of interpretations as to the real meaning of those childhood experiences, and the person then achieves *insight*. With the sudden, explosive force of revelation, this insight strikes home. A brief period of wonderment follows, as the problem falls away like melting snow. In conclusion, the patient walks away from the consulting room, framed in the light from the setting sun, assured that relief and everlasting joy have been attained. This, of course, is a scenario from a bad movie or from the fantasies of a beginning therapist.

There is, however, an element of-reality in the foregoing scenario. A broad band of psychotherapies does attach importance to patients' childhood experiences, though such psycho--therapies vary in the degree of importance they attach to them, the amount of related information they seek, and their view of the effects generated by the experiences. Similarly, *interpretation* is a very common component of psychotherapy. But again, the extent of its use, the kinds and the timing of the interpretations, and the importance attributed to those interpretations vary with the school of psychotherapy. But regardless of terminology, an important element in many forms of psychotherapy is the attempt to get the patient to view past experience in a different light.

The importance attached to insight has eroded over the years. Once it was naively thought that insight into the nature and origin of one's problems would somehow automatically propel the patient into a

higher level of adjustment. Most psychotherapists no longer cling to this simple belief. Insight is still viewed as important, but it is recognized that significant behavioral change can be brought about by other means. Insight may be seen as a facilitator of psychological growth and improvement, but not as something that by it will inevitably bring about such changes. Indeed, waiting for insight to free one from problems can be a delaying tactic used by some patients to avoid taking the responsibility for initiating changes in their lives.

BUILDING COMPETENCE/MASTERY

In one sense, a goal of most therapies is to make the client a more competent and effective human being. All of the foregoing features of psychotherapy will facilitate the achievement of greater effectiveness and satisfaction. But beyond such elements as the therapeutic relationship and anxiety reduction, some forms of therapy have other features that are also applicable here. For example, therapy can be a setting in which the client learns new things and corrects faulty ways of thinking. At times, some forms of therapy will take on distinct teaching overtones. The client may be "tutored" on more effective ways to find a job, or sexual information may be provided to help alleviate past sexual difficulties and promote a better sexual adjustment in the future. Therapy, then, can be more than just exorcising old psychological demons; it can also be a learning experience in the direct sense of the word. Bandura (1989) has emphasized the importance of feelings of self-efficacy in promoting a higher performance level in the individual. In short, those persons who experience a sense of mastery—who feel confident, expect to do well or just feel good about themselves—are more likely to function in an effective fashion.

IMPORTANCE OF PSYCHOTHERAPY

INTRODUCTION

We live in a world that is increasingly complex, intense, and stressful. Most people, at some time or other in their lives, can make good use of psychotherapy as they map their course and steer their way through it.

Many people wonder if they should consider Psychotherapy. See what response you give to the issues and situations below.

First is the aspirational list; meaning that there are areas in your personal and work life that you want to improve. Some examples can be the following:

You sense that life could be more satisfying than it is. You want to feel better about yourself, less stressed, more easily able to use your potential to reach the goals you set for yourself.

You want to feel more effective and comfortable in your relationships, to change non-productive patterns with your partner or your children, parents, co-workers, or friends. You want to be better at communicating and resolving conflicts.

Or it may be the case that you are already having problems in your daily functioning. Such as:

Life's stresses are getting you down, and you want to learn to cope with these stresses. or

You find yourself anxious or depressed, having difficulties at work or school, having trouble concentrating or sleeping, fighting with your family, not taking care of yourself physically, or generally suffer from bad mood under the weather.

These are some of the life experiences that lead people to seek psychotherapy. Perhaps some are familiar to you, or perhaps you wondered for other reasons whether you might benefit from psychotherapy.

Research shows that people can profit from psychotherapy – they can learn, grow, and change at any stage or age in life. It is never too soon and never too late. We will not go into the research detailing the effectiveness of psychotherapy at this point.

WHAT IS PSYCHOTHERAPY? WHAT DOES IT OFFER?

Psychotherapy is a complex process that must vary with each client. It is not a set of simple "technologies" or procedures. Doing it well requires a high degree of education and training and a well-developed capacity for empathic listening.

All psychotherapy, furthermore, depends on the development of a safe, trusting, confidential relationship between the client and the therapist. Most methods of psychotherapy aim at helping clients change unproductive ways of thinking and behaving.

Psychotherapy is a process of discovery – a learning process. In it, we can work together to discover what events, situations, and relationships in your current life or earlier life are leaving you with uncomfortable feelings or ways of dealing with your world that are not working as well as you want.

You work toward acquiring new, effective, helpful ways of understanding your experiences and the events in your life, your responses to them, and the actions you take.

Thus your actions can become less automatic and more fully based on understanding and choice. Your partner, your child or your entire family might participate in the processes of discovery, learning, and change that are characteristic of psychotherapy.

PSYCHOTHERAPY IS AN UNFOLDING PROCESS

It begins by creating the private, confidential context in which it can do its job. The work that is actually done depends on the needs and desires. In some cases the work is to uncover emotional experiences of the past that are brought to the surface by current events, situations, and relationships, so that the present circumstances can be understood and dealt with in a different way.

In the course of this exploring and re-understanding, painful or uncomfortable symptoms such as persistent depressed feelings, fearfulness, or unwanted habits and thoughts often decrease in intensity and frequency, Ways of responding and acting which have been ineffective can also be changed.

Psychotherapy looks at the whole human being and at the many complex factors that have contributed to making every person unique. Symptoms such as anxiety or depression are viewed not just as a problem, but also as a sign that something is hurting inside – that some aspect of the person needs attention.

Psychotherapy assumes that there are parts of our lives of which we are not fully aware. Our feelings, our day and night dreams, our thoughts, and our subtle reactions to people and events are often based partially on hidden assumptions and on memories of earlier events. In these shadows of our daily lives reside many of our old wounds as well as much of our untapped creative energy.

Psychotherapy affords an opportunity to uncover, explore, learn about, and appreciate our perceptions, our hidden assumptions, the ways we have adapted to life-and how all these have evolved.

Psychotherapy takes place in the context of a solid, trustworthy working relationship between the client and the therapist. It helps create the context, the insight, and understanding, the vision, and the support within which durable growth and desirable change can take place. Psychotherapy is not advice-giving. It empowers the client to come to useful personal understanding, to make clearer choices, and to achieve durable independence.

As we become more aware and more appreciative of what is inside us, we can resolve or come to terms both with our internal conflicts and our reactions to people and external events; we feel in better possession of ourselves and more able to make positive and life-affirming decisions. Creative energies no longer need to be spent on keeping old troubles in control, and there is more energy for love, work and play.

We can see past and present events and people more clearly, and come to know more about who we are – independent of other people's definitions. Some have referred to the psychotherapy experience as the awakening of aspects of the inner self, which have been hidden.

Thus in the process of psychotherapy one can see beneath the surface and integrate intellectual understanding with one's emotional experiences. The confidential psychotherapy sessions encourage your thoughts and emotional experiences to flow freely. In this free-flowing process, a variety of thoughts and feelings emerge; they create a window through which you can understand your inner processes more directly.

You jointly examine these moment-to-moment experiences in a non-judgmental manner that provides new understanding about your experience of the world. The process gradually becomes a part of your internal experience and goes with you after the therapy is completed.

Psychotherapy can be a powerful and life changing experience. Awareness is the key that opens the door from the stuck or trapped place that a person feels in to a life that embraces choice and relationship. The less aware we are of our motives, feelings thoughts, actions, perceptions, the more they control us and the more we stay stuck in old patterns that don't work anymore. Relief from symptoms lies in discovering what our everyday reality is and how we meet and deal with that.

Psychotherapy does not translate well into sound bites. It is a broad discipline that holds several approaches to dealing with anxieties and concerns to severe psychological breakdown. Symptoms that are often brought to a Psychotherapist include Depression, Anxiety States, Bereavement, Relationship Issues as well as all the other responses to modern life that for the time being simply don't work.

As we noted earlier, psychotherapy is not just advice giving or helping in an informal context. Psychotherapy differs in two ways from the informal help or advice that one person may give another.

First, psychotherapy is conducted by a trained, certified, or licensed therapist. Secondly, treatment methods in psychotherapy are guided by well-developed theories about the sources of personal problems.

So we can Define Psychotherapy as the intentional application of psychological techniques for obtaining pre-determined changes, like changes in behavior, reduction of psychological distress etc. It is the treatment of emotional and /or related bodily problems by psychological means.

PROBLEMS TREATED WITH PSYCHOTHERAPY

Psychotherapy is an important form of treatment for many kinds of psychological problems.

Two of the most common problems for which people seek help from a therapist are depression and persistent anxiety. People with depression may have low self-esteem, a sense of hopelessness about the future, and a lack of interest in people and activities once found pleasurable.

People with anxiety disorders may feel anxious all the time or suffer from phobias, a fear of specific objects or situations. Psychotherapy, by itself or in combination with drug treatment, can often help people overcome or manage these problems.

People experiencing an **emotional crisis** due to marital problems, family disputes, problems at work, loneliness, or troubled social relationships may also benefit from psychotherapy.

Other problems often treated with psychotherapy include:

obsessive-compulsive disorder,

Personality disorders,

Alcoholism and other forms of drug dependence,

Problems stemming from child abuse,

And behavioral problems, such as eating disorders and juvenile delinquency.

PSYCHOTHERAPY IS NOT SUITABLE FOR SEVERE ILLNESS

Mental health professionals do not rely on psychotherapy to treat schizophrenia, a severe mental illness. Drugs are used to treat this disorder. However, some psychotherapeutic techniques may help people with schizophrenia learn appropriate social skills and skills for managing anxiety.

Another severe mental illness, bipolar disorder (popularly called manic depression), is treated with drugs or a combination of drugs and psychotherapy.

THERE CAN ALSO BE SOME POSSIBLE UNWANTED EFFECTS OF PSYCHOTHERAPY

- (1) Patients may become excessively dependent on therapy or therapist.
- (2) Intensive psychotherapy may be distressing to the patient and result in exacerbation of symptoms and deterioration in relationships.
- (3) Disorders for which physical treatments would be more appropriate may be missed.
- (4) Ineffective psychotherapy wastes time money and damages patient's morale.

ETHICAL CONSIDERATIONS

In helping their clients, all therapists follow a code of ethics.

First, all therapy is confidential. Therapists notify others of a client's disclosures only in exceptional cases, such as when children disclose abuse by parents, parents disclose abuse of children, or clients disclose an intention to harm themselves or others.

Also, therapists avoid dual relationships with clients—that is, being friends outside of therapy or maintaining a business relationship. Such relationships may reduce the therapist's objectivity and ability to work with the client.

CONCLUSION

Mental health professionals agree that the effectiveness of therapy depends to a large extent on the quality of the relationship between the client and therapist.

In general, the better the rapport is between therapist and client, the better the outcome of therapy. If a person does not trust a therapist enough to describe deeply personal problems, the therapist will have trouble helping the person change and improve. For clients, trusting that the therapist can provide help for their problems is essential for making progress.

COURSE OF NEW CLINICAL INTERVENTIONS

There are so many forms of intervention, along with so many different kinds of problems, that it is impossible to describe with precision a sequence of procedures that will apply equally well to every case. Nevertheless, it may be useful to examine the overall sequence of therapeutic progress as described by Hokanson (1983).

INITIAL CONTACT

When clients first contact the clinic or enter the clinician's office, they often do not know exactly what to expect. Some will be anxious; others, perhaps, suspicious. Some do not clearly understand the differences between medical treatment and psychotherapy. Others may be embarrassed or feel inadequate because they are seeking help. The first order of business, then, is for someone to explain generally what the clinic is all about and the kind of help that can be given. This is an important step that can have a significant bearing on the client's attitude and willingness to cooperate. Whether this initial contact is made by a therapist, a social worker, a psychological technician, or someone else, it is important that the contact be handled with skill and sensitivity.

Once the client's reasons for coming have been discussed, the next step in the general sequence can be explained. It may be useful at this point to discuss several specific issues. Who are the professional staff, and what are their qualifications? What about the matter of fees? Are the contacts confidential, and if not, exactly who will have access to information? If there are medical complications, how will these problems be integrated with therapy contacts? Does it seem reasonable to proceed with the client, or does a referral to another agency or professional seem more appropriate? These and other questions must be dealt with up front.

ASSESSMENT

Once it has been mutually agreed that the client can likely profit from continued contact with the clinic, one or more appointments can be arranged for an assessment of the client's problems.

As we know that variety of assessment procedures may be followed, depending on the exact nature of the client's problem, the orientation of the professional staff, and other factors. Often there is an intake interview, which may consist largely on compiling a case history. Other information may be gathered by administering various psychological tests. Sometimes arrangements are made to interview a spouse, family members, or friend in some instances, too, it may be considered desirable to have the client systematically record self-observations of behavior, thoughts, or feelings in different situations.

For some clients, consultations with other professionals may be desirable. A neurological workup may be necessary, or a medical examination may be scheduled to rule out non psychological factors. For some clients whose problems are related to economic problems or unemployment, additional consultation with social workers or job counselors may be appropriate.

After all the information has been compiled and analyzed, a preliminary integration is a tempted. What is desirable here is not a simple diagnostic label but a comprehensive construction of the client's problems in light of all the psychological, environmental, and medical data available. This initial conceptualization of the client will provide guidelines for the specific therapeutic interventions to be undertaken. A therapy proceeds, changes in the conceptualization of the client will likely occur, and then peutic goals and techniques may well change somewhat as a result. Assessment *is* an ongoing process that does not cease with the second or third interview.

THE GOALS OF TREATMENT

As soon as the assessment data are integrated (the therapist and client can begin to discuss more systematically the nature of the problem and what can be done about them. Some therapists describe this phase as a period of negotiation over the goals of treatment. Others suggests that client and therapist enter into a ‘contract’ in which the therapist agrees to alleviate a specified set of the client's problems and to do it in the most effective way possible. Naturally, no one can absolutely promise a perfect cure or resolution of *all* problems. Clients, in turn, will state their desires and intentions. In effect, their contract usually covers such matters as the goals of therapy, length of therapy, frequency of meetings, cost, general format of therapy, and the client's responsibilities.

Again, it is important to understand that various features of the contract may be modified as time goes on. One must deal with clients in terms of what they are prepared to accept now. An especially anxious or defensive client may be willing to accept only a limited set of goals or procedures. As therapy proceeds, that client may become more open and comfortable and thus better able to accept an expanded set of goals. Then, too, additional information about the client may surface during therapy, with the result that some modifications may be necessary. Some clients will want to expand their goals for treatment as they gain more confidence and trust in the therapist. Discussion of goals and methods must be handled with discretion, sensitivity, and skill. Therapists must try to take clients only where they are psychologically prepared to go. Moving too fast or setting up grandiose treatment objectives can frighten or alienate certain clients. It is usually desirable to proceed with enough subtlety and skill so that clients feel they are the ones who are establishing or modifying the goals.

Hokanson (1983) uses a classification of therapy goals in terms of *crisis management*, *behavior change*, *corrective emotional experience*, and *insight and change*. Given below are the goals. In the most general sense, the goal of psychotherapy is to improve the patient's level of psychosocial adjustment and to increase the patient's capacity for achieving satisfactions from life.

1. Therapeutic Goal is Crisis management

Examples of problems are Incipient psychotic episode; poorly planned, impulsive actions; explosive acting-out behavior.

Treatment Procedures are Supportive therapy; emergency consultation in psychiatric hospital, crisis work in community.

2. Therapeutic goal is Behavior change.

Examples of problems are Habits and behaviors of long standing that create problems for patient.

Treatment procedures are Behavior therapy, self-regulation techniques.

3. Therapeutic goal is Corrective emotional experience.

Examples of problems are Broadly based maladaptive ‘way of life’ stemming from persistent negative interpersonal experience.

A treatment procedure is Relationship therapy.

5. Therapeutic goal is Insight and change

Examples of Problems are: Symptoms of distress for which client can find no suitable explanation.

Treatment procedures are Psychoanalytic therapy; client centered therapy; existential analysis; gestalt therapies; other therapies.

IMPLEMENTING TREATMENT

After the initial goals are established, the therapist decides on the specific form of treatment. It may be client-centered, cognitive, behavioral, or psychoanalytic. The treatment may be very circumscribed and deal only with a specific phobia, or it may involve a broader approach to the client's personality style. All of this must be carefully described to the client in terms of how it relates to the client's problems, the length of time involved, and perhaps even the difficulties and trying times that may lie ahead. Exactly what is expected of the client will be detailed as well free association, "homework" assignments, self monitoring, or whatever. Inherent in all of this is the issue of informed consent. Just as participants in research have a right to know what will happen, so do therapy patients have the right to know what will happen in therapy.

TERMINATION, EVALUATION AND FOLLOW-UP

It is certainly to be hoped that a client will not be in psychotherapy her or his entire life. As the therapist begins to believe the client is able to handle his or her problems independently, discussions of termination are initiated. Sometimes termination is a gradual process in which meetings are reduced, for example, from once a week to once a month. As termination approaches, it is important that it be discussed in detail and the client's feelings and attitudes thoroughly aired and dealt with. Clients do sometimes terminate suddenly, in some cases before the therapist feels it is appropriate. Whenever possible, however, it is important to find the time to discuss at least briefly the client's feelings about leaving the support of therapy and the possibility of returning later for additional sessions if necessary. In other instances, the termination is forced because the therapist must leave the clinic, which can precipitate numerous client reactions. Many therapists find that "booster sessions" scheduled months after termination—perhaps 6 months and then one year later—can be quite helpful. These booster sessions are used to review the client's progress, to address new problems or issues that have arisen in the interim, and to solidify the gains that have been made.

It is important to evaluate with clients the progress they have made. Therapists should also compile data and make notes on progress in order to evaluate the quality of their own efforts or the agency's services and continue to improve services to clients. The most reliable data, of course, will come from formally designed research projects. However, clinicians and individual agencies owe it to themselves and their clients to evaluate the success of their own efforts.

COMMON ELEMENTS OF PSYCHOTHERAPY

1. Realistic relationship between patient and therapist
2. Restoration of morale
3. Release of emotion
4. Rationale
5. A combination of active listening and talking
6. Suggestion

TYPES OF PSYCHOTHERAPY

Psychotherapy encompasses a large number of treatment methods, each developed from different theories about the causes of psychological problems and mental illnesses. There are more than 250 kinds of psychotherapy, but only a fraction of these have found mainstream acceptance.

Many kinds of psychotherapy are offshoots of well-known approaches or build upon the work of earlier theorists. We will not go into the details of the popular therapies here as they will be discussed thoroughly in the coming lectures.

POPULAR THERAPIES

The methods of therapists vary depending on their theory of personality, or way of understanding another individual.

Most therapies can be classified as:

(1) psychodynamic,

(2) humanistic,

(3) behavioral,

(4) cognitive,

or (5) eclectic.

In the United States, about 40 percent of therapists consider their approach eclectic, which means they combine techniques from a number of theoretical approaches and often tailor their treatment to the particular psychological problem of a client.

ANOTHER CLASS OF THERAPIES

Therapies can also be classified in regard to the number of persons that can be helped at a time. Forms of therapy that treat more than one person at a time include:

Group therapy,

Family therapy,

and Couples therapy.

These therapies may use techniques from any theoretical approach. Other forms of therapy specialize in treating children or adolescents with psychological problems.

SOME GENERAL CONCLUSIONS

A generalization about the effectiveness of psychotherapy seems to be emerging. However, there is little evidence to suggest that one form of therapy is in any sense uniquely effective for all

problems. J. D. Frank's (1979) conclusions about psychotherapy several decades ago also seem to characterize current thinking:

1. Nearly all forms of psychotherapy are somewhat more effective than unplanned or informal help.
2. One form of therapy has typically not been shown to be more effective than another for all conditions.
3. Clients who show initial improvement tend to maintain it.
4. Characteristics of the client, the therapist, and their interaction may be more important than therapeutic technique.

This last point is important because it suggests that, given the equal effectiveness of various forms of therapy, the field should turn its attention to those elements that are common to all forms of therapy. Not all agree with this conclusion, however. Telch (1981), for one, argues that the more potent the therapeutic technique being used, the less important are therapist or client characteristics. As an example, Telch notes that evidence strongly suggests that systematic desensitization is highly effective with patients with phobias. Yet for those who have trouble using mental imagery, desensitization may prove ineffective, and modeling may be the technique of choice. Lazarus (1980) also argues that specific therapies are indicated for specific problems. At the same time, however, he seems to suggest that various nonspecific factors play an important role in improvement. For example, regardless of whether the therapist is using desensitization, modeling, or the quest for insight, the result may be an increased sense of self-efficacy on the part of the patient that, in turn, facilitates change.

Perhaps the safest course is to pursue a two front assault. Careful research should be designed to help us predict which therapy will best work for a given problem. Lists of empirically supported treatments for common psychological problems should continue to be updated and expanded. At the same time, effort should also be devoted to investigating the factors common to all therapies and the manner in which they operate. Research might also focus on the effects of matching patients and therapists in terms of relevant characteristics. However, in the final analysis, therapist competence may be more critical than the simple matching of patients and therapists along lines of race, class, or sex.

Therapy is an intermittent process that occurs, for example, once a week. Thus, it is only a small part of a client's ongoing life. Other, concurrent experiences may be as important or even more important in determining whether or not improvement occurs. Also, what happens in therapy may interact with other experiences in complex ways. Others may begin to react differently to the client, and these changed reactions may reinforce or counteract changes induced by therapy. Changes in the client may threaten family members, who then quietly conspire to sabotage treatment. The whole process is so complex and interactive that it is difficult for research to show what factors in therapy are related to client change or lack of it (U. D. Frank, 1982).

Perhaps the greatest reality limitation of all is suggested by Barlow's (1981) charge that many clinical psychologists simply do not pay attention to outcome research. They continue doing what they have always done without full realization of the difficulties in making valid inferences from their experiences with single cases (Kazdin, 1981). Persons (1995) discuss how deficits in training and the perceived inaccessibility of resources have caused clinicians to delay adopting empirically supported treatment techniques. However, Chambless et al. (1996) has said it best:

Psychology is a science. Seeking to help those in need, clinical psychology draws its strength and uniqueness from the ethic of scientific validation. Whatever interventions that mysticism, authority, commercialism, politics, custom, convenience, or carelessness might dictate, clinical psychologists focus on what works. They bear a fundamental ethical responsibility to use where possible interventions that work and to subject any intervention they use to scientific

scrutiny.

Clinical psychologists must learn more about the specifics of the effectiveness of various forms of therapy and routinely implement this knowledge. They are under both ethical and scientific imperatives to do so.

NATURE OF SPECIFIC THERAPEUTIC VARIABLES

It would be pleasant if psychotherapy were a simple routine in which the therapist makes a diagnosis, conveys it to the patient, gives a lecture or two, and presto, the patient is cured. Unfortunately, things do not work that way. Indeed, it is often necessary to spend considerable time correcting patients' expectations that they will be given a simple psychological prescription. Because psychotherapy is an active, dynamic process, passivity and lack of motivation can be obstacles. A number of factors involving the nature of the patient, the therapist, and the patient-therapist interaction affect the process of therapy in important *ways*. Often their effects are felt over and above the specific mode of therapy employed.

THE PATIENT OR THE CLIENT

Are there specific or general patient characteristics that influence the outcomes of therapy? Such a deceptively simple question really has no answer other than "It depends." The reason is that the outcomes of therapy are exceedingly complex events that are not shaped by patient characteristics alone. They are also determined by therapist qualities and skills, the kinds of therapeutic procedures employed, the circumstances and environment of patients, and so on. Eventually, the field will have to identify specifically which kinds of patients benefit from which procedures, under which circumstances, and by which therapists. Now we will discuss some of the more prominent patient's variables that have been related to outcomes in traditional therapies.

1. The Degree of Patient's Distress

A broad generalization often made by clinicians is that the persons who need therapy the least are the persons who will receive the greatest benefit from it. A good prognosis may be expected for a patient who is experiencing distress or anxiety but is functioning well behaviorally.

At best, however, the research data are contradictory and inconsistent (which, again, probably reflects the impossibility of coming to a simple conclusion without considering many other factors). For example, one group of studies finds that greater initial distress is associated with greater improvement. Another group of studies finds exactly the reverse. To complicate matters further, Miller and Gross (1973) contend that the relationship between improvement and the initial disturbance is curvilinear; that is, patients with little disturbance or extreme disturbance show poorer outcomes than do moderately disturbed patients. Summarizing research in this area, Garfield (1994) concludes that, although mixed findings across studies temper one's degree of confidence in general conclusions, more recent studies seem to find with some consistency that individuals who are more severely disturbed have poorer outcomes. Intelligence. In general, psychotherapy requires a reasonable level of intelligence (Garfield, 1994). This is not to say that persons who suffer from mental retardation do not, under certain conditions, benefit from counseling or from the opportunity to talk about their difficulties. Nevertheless, other things being equal, brighter individuals seem better able to handle the demands of psychotherapy. This is so for several reasons.

First, psychotherapy is a verbal process. It requires patients to articulate their problems, to frame them in words.

Second, psychotherapy requires patients to establish connections among events. Patients must have the capacity to see relationships between prior events and current problems, and ultimately they must be able to connect their current feelings with a variety of events whose relationship to those feelings may at first seem improbable.

Finally, to enable connections among events to be made, psychotherapy requires a degree of introspection. Since traditional psychotherapy has always emphasized the inner determinants of behavior, it follows that a patient who finds it difficult to look inward may have problems in adjusting to the process.

However, behavioral forms of therapy have often been used with considerable success with individuals suffering from cognitive limitations. A variety of behavior modification approaches are quite feasible, especially when goals involve specific behavioral changes rather than insight. In such populations, improved social abilities, self-care skills, and other skills can be developed with a focus on behavior rather

than cognitions. As a generalization, when behavioral deficits are the problem, behavioral techniques are frequently the preferred ones.

2. CLIENT'S AGE:

Other things being equal, younger patients have long been considered the best bets for therapy. Younger patients are presumably more flexible or less "set in their ways." Perhaps younger patients are better able to make the appropriate connections because they are closer to their childhood years, or perhaps they have been reinforced for negative behaviors less often than their older counterparts. In any event, the notion that younger persons do better in therapy is quite prevalent among clinicians. Research evidence supporting the contention that older clients have a poorer prognosis, however, is weak at best.

It is best to consider not age alone, but rather the specific characteristics of the prospective patient. It often happens that a 55-year-old will be an active, open, introspective person who can really benefit from therapy. In short, denial of therapy to an elderly person can be construed as a form of ageism in some instances! Research supports the efficacy of various forms of both cognitive-behavioral and psychodynamic treatment with older adults.

CLIENT'S MOTIVATION

Psychotherapy is sometimes a lengthy process. It demands much from a patient. It can be fraught with anxiety, setbacks, and periods of a seeming absence of progress. If psychotherapy is to be successful, it will force the patient to examine corners of the mind that have long remained unscrutinized. It may demand that the patient engage in new behaviors that will provoke anxiety. As was noted previously, psychotherapy is not a passive process in which insights are fed to the patient. Instead, the patient must actively seek insights. Typically, the search is not easy. For these and other reasons, successful psychotherapy seems to require motivation.

At some level, the patient must want psychotherapy (though there are times during psychotherapy when even highly motivated patients want out). It follows, then, that psychotherapy is a voluntary process. One cannot be forced into it. When people are forced, either openly or subtly, to become patients, they rarely profit from the experience. Therapy is not likely to be of much benefit to the prisoner who seeks therapy to impress a parole board; to the college student who, following a marijuana charge, is given the option of reporting to a counseling center or facing the prospect of jail; or to the person who undergoes therapy to protect an insurance claim. Despite the conventional wisdom that cites client motivation as a necessary condition for positive change, research support is mixed (Garfield, 1994).

4. CLIENT'S OPENNESS:

Most therapists intuitively attach a better prognosis to patients who seem to show some respect for and optimism about the utility of psychotherapy. They are relieved when patients are willing to see their problems in psychological rather than medical terms. Such persons can be more easily "taught to be good psychotherapy patients," in contrast to patient *who* view their difficulties as symptoms that can be cured by an omniscient, authoritative therapist while they passively await the outcome. Thus, a kind of "openness" to the therapeutic process appears to make the patient a better bet for therapy.

5. CLIENT'S GENDER:

In the present climate, there are several prominent issues related to gender. One is the relationship between the outcomes of therapy and the gender of the patient. Research does not support the view that biological sex of the client is significantly related to outcome in psychotherapy.

A second, more volatile issue is whether sexism operates in therapy and whether, for example, male therapists exploit female patients. Stricker (1977) suggests that this issue offers serves as a platform for extremists on both sides those at the feminist end of the spectrum claim exploitation, and the male chauvinists deny that it exists. Research into the question of whether therapists and counselors are guilty of gender bias and stereotyping is highly inconsistent. Many, however, are confident in suggesting that clinical psychologists should do a better job of educating clinical students regarding gender issues). Good, Gilbert,

and Scher (1990) have even recommended a brand of psychotherapy called **Gender Aware Therapy** (GAT).

GAT integrates feminist psychotherapy and knowledge of gender into a treatment approach for both women and men. This approach, which focuses on exploring unique gender-related experiences, may be appropriate for a variety of issues faced by women (such as career development and eating disorders) and men (such as depression and sexual dysfunction). Finally, although sex of the client has not been reliably linked to outcome, it is probably true that sex or gender of the therapist may be especially important to consider in certain cases. For example, women rape victims may feel much more comfortable talking to women psychotherapists than to men psychotherapists.

FEMINIST THERAPY:

For many years, therapy was a male-dominated enterprise. The special problems facing women were poorly addressed and poorly understood by male therapists. New treatment models were needed to deal with the disorders prevalent among women. What was needed, many felt, was a *feminist therapy*—a therapy that would recognize the manner in which women have been oppressed by society through the ages.

Feminist therapy grew out of the women's movement and has been quite visible since the early 1970s. It acknowledges that many of the personal problems of women arise out of the social position women are forced to adopt. It points to the failure of the psychiatric and psychological establishment to see the oppression of women as a prime factor in their development of personal distress. The feminist approach views the relationship between therapist and patient in terms of equality rather than power versus subordination. Feminists, in short, do not take kindly to the "power of expertise." This form of therapy also requires a frank admission of the values of both therapist and client and the development of specific contracts with regard to the therapy process itself.

Feminist therapists tend to be especially attuned to specific emotional problems experienced by women: anger and its expression, learned helplessness and depression, autonomy and dependency, and sexuality. Also important are concrete issues such as work, finances, and family choices. Particularly critical are issues of personal freedom and choice and a willingness to consider life alternatives that depart from traditional sex-role expectations.

6. Race, Ethnicity and Social Class:

For years, debate has raged over the effectiveness of therapy for ethnic minority patients—especially when they are treated by white therapists. It does appear that many therapeutic techniques have been designed and developed for white, middle and upper-class patients. Too few procedures seem to take into account the particular cultural background and expectations of patients. Banks (1972) has suggested that greater rapport and self-exploration may occur when both therapist and patient are of the same race. Others have reached the same conclusion regarding social class, background, values, and experience and have proposed that conventional therapies be abandoned in favor of more supportive techniques. Still, two decades of research have seemingly failed to show conclusively that ethnic minorities achieve differential treatment outcomes.

It was Schofield (1964) who described the psychotherapist's belief in the ideal patient as the **YAVIS** syndrome (**young, attractive, verbal, intelligent, and successful**). However, numerous reviews of existing research have concluded that there appears to be virtually no relationship between social class and outcome (Garfield, 1994). What has not been examined in great detail is whether patients and therapists should be matched according to social class or whether some forms of psychotherapy are more effective than others for patients from lower socioeconomic levels.

When there is a significant difference between the social class or the values of the patient and those of the therapist, some researchers have found that the patient's willingness to remain in therapy may suffer. Some have also suggested that traditional forms of therapy are inappropriate for patients from lower

socioeconomic levels. Others, however, maintain that special efforts to build a therapeutic relationship can overcome the difficulties encountered when therapist and patient differ in background.

Few would disagree; however, that cultural *sensitivity* on the part of the therapist is very important. The field needs to develop culturally sensitive mental health services. Clinicians also need to develop a kind of cognitive empathy, or what Scott and Borodovsky (1990) have referred to as cultural role taking in their work with ethnic minorities. In the final analysis, it is imperative that clinical psychology develop culturally sensitive therapists who can work effectively with culturally diverse populations

THERAPISTS REACTIONS TO PATIENTS:

In the best of all worlds, it would not make any difference whether or not the patient was an engaging person who elicited positive responses from others. A therapist should be able to work with elegant effectiveness regardless of her or his positive or negative reactions to the patient. Therapists are far from perfect creatures; they are indeed affected by the personal qualities of other persons. Fortunately, the understanding and self-control of therapists in their professional relations with patients exceed the understanding and self-control of many laypersons in their social and interpersonal relationships. Nevertheless, there is some evidence to suggest that patients who receive higher global ratings of attractiveness or to whom the therapist can relate better tend to have better outcomes in therapy (Garfield, 1994). Also, in at least one study, therapists were less inclined to treat hypothetical patients whom they did not like as compared to those they liked.

THE THERAPIST'S CHARACTERISTICS:

It will hardly come as a shock to learn that certain therapist characteristics may affect the process of therapy. Having a specific theoretical or therapeutic orientation does not override the role of personality, warmth, or sensitivity. Freud very early recognized the potential effects of the psychoanalyst's personality on the process of psychoanalysis. To "prevent" such personal factors from affecting the process, he recommended that analysts undergo periodic analyses so that they could learn to recognize and control them. In a sense, Rogers turned to the other side of the same coin and made therapist qualities such as acceptance and warmth the cornerstones of therapy. Although Freud may have emphasized the negative and Rogers the positive, they both set the stage for an understanding of the role of therapist variables in the process of therapy. Unfortunately, although nearly everyone agrees that therapist variables are important, there is much less agreement on specifics. How therapist characteristics contribute to therapy outcome has become an important research area.

THERAPIST'S SEX, AGE AND ETHNICITY

In a recent comprehensive review of therapist features that may influence psychotherapy outcome, Beutler et al. (1994) report that the available research evidence suggests that therapist age is not related to outcome, that female versus male therapists do not appear to produce significantly better therapeutic effects, and that patient-therapist similarity with regard to ethnicity does not necessarily result in better outcome. Beutler et al. acknowledge that these conclusions may run counter to prevailing sociopolitical opinions. At the same time, they assert that existing research in this area suffers from a number of methodological problems. These therapist variables may interact with client characteristics, setting for treatment, and modality of treatment. Again, the solution seems to be for therapists to become more sensitized to age, gender, and racial identity issues in relation to themselves as well as to the patient.

THERAPIST'S PERSONALITY:

In discussing therapist variables, Strupp and Bergin (1969) made two points worth noting.

First, even though the evidence shows that the therapist's personality is a potent force; other factors in combination largely determine therapy outcomes.

Second, research in this area has taken a back seat as behavioral therapies have gained in popularity. However, as behavior therapists attend increasingly to factors other than techniques or mechanics, it is likely that they will "rediscover" the importance of therapist characteristics and begin to integrate those characteristics into their research and practice.

Is there a set of personality traits that the "ideal" therapist should possess? Krasner (1963), with tongue in cheek, suggested that the research literature would depict the ideal therapist as:

mature, well-adjusted, sympathetic, tolerant, patient, kindly, tactful, nonjudgmental, accepting, permissive, non-critical, warm, likable, interested in human beings, respectful, cherishing and working for a democratic kind of interpersonal relationship with all people, free of racial and religious bigotry, having a worthwhile goal in life, friendly, encouraging, optimistic, strong, intelligent, wise, curious, creative, artistic, scientifically oriented, competent, trustworthy, a model for the patient to follow, resourceful, emotionally sensitive. Self-aware, insightful of his own problems. spontaneous, having a sense of humor, feeling personally secure, growing and maturing with life's experiences, having a high frustration tolerance, self-confident, relaxed, objective, self-analytic. aware of his own prejudices, humble, consistent, open, honest, frank, technically sophisticated, professionally dedicated, and charming.

Certainly no human being, let alone a therapist, could possibly possess all of these traits (even allowing for overlap in terms). Therefore, as Goldstein, Heller, and Sechrest (1966) point out, it is doubtful whether the concept of the "ideal therapist" is very useful. Any study that is confined to a single trait or a small group of traits seems to make a great deal of sense. Taking all the traits together makes the message much less coherent.

EMPATHY, WARMTH AND GENUINENESS:

Swenson (1971) has suggested that a major factor that differentiates successful from unsuccessful therapists is their interest in people and their commitment to the patient. In a similar vein, Brunink and Schroeder (1979) found that expert therapists of several different theoretical persuasions were similar in their communication of empathy.

The attention to empathy, along with the related notions of warmth and genuineness, grew out of Carl Rogers' (1951) system of client-centered therapy: He described these variables as necessary and sufficient conditions for 'therapeutic change (Rogers, 1957). Some research evidence has seemed to point to a relationship between these three qualities and successful outcomes in therapy.

It has also been argued (Beutler et al., 1994; Gunman, 1977) that these three features reflect not only qualities of the therapist but also qualities of the therapeutic relationship. Viewed this way, these features can be considered indicators of the quality of the therapeutic alliance. Studies have consistently demonstrated that the nature and strength of the working relationship between therapist and patient is a major contributor to positive outcome (Beutler et al., 1994).

FREEDOM FROM PERSONAL PROBLEMS:

Does personal therapy lead to greater effectiveness as a therapist? In a survey of 749 practicing therapists who were APA member, 44% responded regarding their own personal problems. Of this group, 18% reported that they had never received any form of personal therapy. But more than 44% reported experiencing personal distress in the past three years, and almost 37% said that it decreased the quality of patient care. Further, out of 562 licensed psychologists, more than a third reported high levels of both emotional exhaustion and depersonalization what is often called "burnout".

Although therapists need not be paragons of adjustment, it is unlikely that a therapist beset with emotional problems can be as effective as one would like. It is important that therapists recognize areas in their own lives that are tender. The tendency to become angry or anxious when certain topics arise or the inability to handle a client's questions without becoming defensive is a signal that something is amiss. In short, self-

awareness is an important quality in the therapist (I. B. Weiner, 1975). Therapists must be able to look at their patients with objectivity and not become entangled in their personal dynamics. Nor is the therapy room a place for the gratification of one's own emotional needs

In some instances, the therapist may find it necessary to undergo personal therapy in order to resolve emotional problems. However, whether undergoing personal therapy makes the therapist more effective has long been argued. Unfortunately, the actual research evidence (Beutler et al., 1994) is less than definitive. This is not surprising when one considers the complexity of the therapy process. Nevertheless, it would not seem necessary for all therapists to undergo treatment as a qualification for conducting therapy.

SEXUAL EXPLOITATION:

It is noticed in no uncertain terms that sexual intimacies between patient and therapist are to be condemned unequivocally. Unfortunately, there are still too many examples of victimization of women by their male therapists, and an increasing number of cases of women being victimized by female therapists. Many questions about this kind of unnatural conduct, what kinds of behaviors are appropriate on the part of the therapist, what patients should do in response, and with whom they can lodge complaints have been discussed in **Committee on Women in Psychology** (1989). Too often, women do not complain to the proper authorities because they lack knowledge about the complaint process. Suggestions are available, however, to help women file complaints even the act of touching clients or other nonerotic physical contacts are sensitive issues that need to be addressed in training programs and by ethics committees. One wonders whose needs are being met by such contact.

THERAPIST'S EXPERIENCE AND PROFESSIONAL IDENTIFICATION:

Conventional wisdom suggests that the more experienced the psychotherapist, the more effective she or he will be with patients. Although this is intuitively appealing the bulk of research evidence has not supported this position. Not only does there appear to be a consistent relationship between therapist experience and positive outcome, but several suggest that *paraprofessionals* trained specifically to conduct psychotherapy produce outcomes equivalent to, or even sometimes exceeding those produced by trained psychotherapists.

Does one profession turn out better therapists than others? Over the years, there have been many running feuds over which profession is best *equipped* to carry out proper therapy. For a longtime, psychiatrists actively sought to prevent clinical psychologists from conducting therapy it, the absence of psychiatric supervision. Their main argument was often reducible to one of medical omniscience and was never based on solid research, and clinical psychologists gradually freed themselves from this psychiatric domination. But old animosities and fights over territorial prerogatives fade slowly. Indeed, with the availability of federal funds to pay for health costs and with Insurance coverage being broadened to include psychotherapy, economic competition has once again kindled these territorial fights between psychiatry and clinical psychology.

In fact, no real evidence supports the argument that one profession boasts superior therapists (be they clinical psychologists, psychiatric social workers, psychiatrists, or psychoanalysts). In the *Consumer Reports* study "Mental Health," (1995), people who saw a mental health professional rather than a family physician for their psychological problems reported greater progress and more satisfaction with their treatment. However, psychologists, psychiatrists, and social workers all received similarly high satisfaction ratings from consumers. Thus, at this point in time, data do not seem to support the superiority of one mental health profession over others in terms of effectiveness and client satisfaction.

To this point, we have surveyed a variety of patient and therapist variables that are commonly assumed to be related to outcome in psychotherapy. As noted in our discussion, many of these assumptions are unsupported by psychotherapy research findings.

THE BEGINNING OF PSYCHOANALYSIS

PSYCHOANALYSIS

The psychodynamic approach to therapy focuses on unconscious motives and conflicts in the search for the roots of behavior. It likewise depends heavily on the analysis of past experience. The epitome of this perspective resides in the original psychoanalytic theory and therapy of Sigmund Freud.

Without question, psychoanalytic theory represents one of the most sweeping contributions to the field of personality. What began as a hafting flow of controversial ideas based on a few neurotic Viennese patients was transformed into a torrent that changed the face of personality theory and clinical practice. Hardly an area of modern life remains untouched by Freudian thought. It influences art, literature, and motion pictures. Such words and phrases as *ego*, *unconscious*, *death wish*, and *Freudian slip* have become a part of our everyday language.

What is true in our culture at large is no less true for therapeutic interventions. Although psychoanalytic therapy is sometimes regarded as an anachronism, it is still widely practiced by clinical psychologists. In fact, almost every form of therapy that relies on verbal transactions between therapist and patient owes some debt to psychoanalysis—both as a theory and as a therapy. Whether it be existential therapy, cognitive-behavioral therapy, or family therapy, psychoanalytic influences are clearly evident, even though they are not always formally acknowledged.

PSYCHOANALYSIS: THE BEGINNING

In 1885, Freud was awarded a grant to study in Paris with the famous Jean Charcot. Charcot was noted for his work with hysterics. Hysteria then was viewed as a "female" disorder most often marked by paralysis, blindness, and deafness. Such symptoms suggested a neurological basis, yet no organic cause could be found. Earlier, Charcot had discovered that some hysterical patients would, while under hypnosis, relinquish their symptoms and sometimes recall the traumatic experiences that had caused them. It is likely that such recall under hypnosis helped stimulate Freud's thinking about the nature of the unconscious. In any event, Freud was greatly impressed by Charcot's work and, upon his return to Vienna, explained it to his physician friends. Many were quite skeptical about the benefits of hypnosis, but Freud nevertheless began to use it in his neurological practice.

THE CASE OF ANNA

A few years earlier, Freud had been fascinated by Josef Breuer's work with a young "hysterical" patient called Anna O. She presented many classic hysterical symptoms, apparently precipitated by the death of her father. Breuer had been treating her using hypnosis, and during one trance she told him about the first appearance of one of her symptoms. What was extraordinary, however, was that when she came out of the trance, the symptom had disappeared! Breuer quickly realized that he had stumbled onto something very important, so he repeated the same procedures over a period of time. He was quite successful but then a complication arose. Anna began to develop a strong emotional attachment to Breuer. The intensity of this reaction, coupled with a remarkable session in which Anna began showing hysterical labor pains, convinced Breuer that he should abandon the case. The jealousy of Breuer's wife may also have played a part in his decision.

These events, with which Freud was familiar undoubtedly helped prompt his initial theories about the unconscious, the "talking cure," catharsis, transference, and moral anxiety. He treated many of his patients with hypnosis. However, not all patients were good candidates for hypnotic procedures. Others were easily hypnotized but showed a disconcerting tendency not to remember what had transpired during the trance, which destroyed most of the advantages of hypnosis.

An example was Elisabeth, a patient Freud saw in 1892. He asked her, while she was fully awake, to concentrate on her ailment and to remember when it began. He asked her to lie on a couch as he pressed his hand against her forehead. Subsequently, Freud found that placing his hand on patients' foreheads and

asking them to remember events surrounding the origin of the symptom was just as effective as hypnosis. He soon gave up placing his hand on patients' foreheads and simply asked them to talk about whatever came to their minds. This was the beginning of what came to be known as the method of free association.

THE FREUDIAN VIEW: A BRIEF REVIEW

A major assumption of Freudian theory, *psychic determinism*, holds that everything we do has meaning and purpose and is goal directed. Such a view enables the psychoanalyst to utilize an exceptionally large amount of data in searching for the roots of the patient's behavior and problems. The mundane behavior, the bizarre behavior, the dream, and the slip of the tongue all have significance and meaning.

To account for many aspects of human behavior, Freud also assumed the existence of *unconscious motivation*. His use of this assumption was more extensive than that of any previous theorist, and it allowed him to explain much that had previously resisted explanation. The analyst first of all assumes that healthy behavior is behavior for which the person understands the motivation. The important causes of disturbed behavior are unconscious. Therefore it follows that, the goal of therapy is to make what is unconscious, conscious.

THE INSTINCTS

The energy that makes the human machine function is provided by two sets of instincts: the *life instincts (Eros)* and the *death instincts (Thanatos)*. The life instincts are the basis for all the positive and constructive aspects of behavior; they include such *bodily* urges as sex, Hunger, and thirst as well as the creative components of culture, such as art, music, and literature.

But all these activities can serve destructive ends as well. When this happens, the death instincts are responsible. In practice, modern analysts pay scant attention to death instincts. However, Freud found them necessary to account for the dark side of human. In any event, for Freud the ultimate explanation for all behavior was an instinctual one, even though the instincts he posited are unobservable cannot be measured, and often seem better able to explain events after they occur than before.

THE STRUCTURE

Psychoanalysis views personality as composed of three basic structures: the *id*, the *ego*, and the *superego*.

The *id* represents the deep, inaccessible portion of the personality. We gain information about it through the analysis of dreams and various forms of neurotic behavior. The id has no commerce with the external world—it is the true psychic reality. Within the id reside the instinctual urges. With their desire for immediate gratification. The id is without values, ethics, or logic. Its essential purpose is to attain the unhampered gratification of urges whose origin resides in the somatic processes. Its goal then, is to achieve a state free from all tension or, if that is unattainable, to keep the level as low as possible.

The id is said to obey the *pleasure principle*, trying to discharge tension as quickly as tension reaches it. To do this, it uses a *primary process* kind of thinking, expending energy immediately in motor activity (for example, a swelling of the bladder that results in immediate urination). Later, the id replaces this aspect of the primary process by another form. It manufactures a mental image of whatever will lessen the tension (for example, hunger results in a mental representation of food). Dreaming is regarded as an excellent example of this form of the primary process. Of course, this primary process cannot provide real gratifications, such as food. Because of this inability, a second process develops, bringing into play the second component of personality the ego.

The *ego* is the executive of the personality. It is an organizational system that uses perception, learning, memory, and a need satisfaction. It arises out of the inadequacies of the id in serving and preserving the organism. It operates according to, the *reality principle*, deferring the gratification of instinctual urges until a suitable object and mode are discovered. To do this, it employs the *secondary process*—a process that involves learning, memory, planning, judgment, and so on. In essence, the role of the ego is to mediate the

demands of the superego, and the real world in a way that will provide satisfaction to the organism and at the same time prevent it from being destroyed by the real world.

The third component of the personality is **the superego**. It develops from the ego during childhood, rising specifically out of the resolution of the *Oedipus complex* (the child's sexual attraction to the parent of the opposite sex). It presents the ideals and values of society as they are conveyed to the child through the words and deeds of the parents. These ideals and values are also conveyed via rewards and punishments. Be as tort at is punished' becomes incorporated into the individual's Conscience, whereas rewarded behavior generally Becomes a part of the *ego* ideal. Thus, within the superego, the conscience eventually serves the purpose of punishing individuals by making them feel guilty or worthless, whereas the rewards of the ego ideal are experienced as pride and a sense of worthiness. In general, the role of the superego is to block unacceptable id impulses, to pressure the ego to serve the ends of morality rather than expediency, and to generate strivings toward perfection.

THE PSYCHOSEXUAL STAGES

Like many other theorists, Freud considered childhood to be of paramount importance in shaping the character and personality of the individual. He believed that each person goes through a series of developmental stages. Termed *psychosexual* stages, each is marked by the involvement of a particular erogenous zone of the body (especially during the first five years). **The oral stage**, which lasts about a year, is a period in which the mouth is the chief means of reaching satisfaction. It is followed by the **anal stage**, in which attention becomes centered on defecation and urination; this stage may span the period from 6 months to 3 years of age. Next is the **phallic stage** (from 3 to 7 years of age), during which the sexual organs become the prime source of gratification. Following these so-called pregenital stages, the child enters the **latency stage**, which is characterized by a lack of overt sexual activity and, indeed, by an almost negative orientation toward anything sexual. This stage may extend from about the age of 5 until 12 or so. Following the onset of adolescence, the **genital stage** begins. Ideally, this stage will culminate in a mature expression of sexuality, assuming that the sexual impulses have been handled successfully by the ego.

When the child experiences difficulties at any stage, these difficulties may be expressed in symptoms of maladjustment, especially when the troubles are severe. Either excessive frustration or overindulgence at any psychosexual stage will lead to problems. The particular stage at which excessive gratification or frustration is encountered will determine the specific nature of the symptoms. Thus, obsessive-compulsive symptoms signify that the individual failed to successfully negotiate the anal stage, whereas excessive dependency_ needs in an adult suggest the influence of the oral stage. Freud believed that all people manifest a particular character formation, which may not always be particularly neurotic but nonetheless does represent perpetuations of original childish impulses, either as sublimations of these impulses or as reaction formations against them. Examples would include an oral character's food fads or puristic speech patterns, an anal character's prudishness or dislike of dirt, and a phallic character's excessive modesty.

Anxiety

The circumstances that give rise to the formations of the ego, and later the superego, produce a painful affective experience called anxiety. Exaggerated responses of the heart, the lungs, and other internal organs are perceived and experienced as anxiety. There are three general classes of **anxiety**.

The first is **reality anxiety**-anxiety based on a real danger from the outside world.

Neurotic anxiety stems from a fear that one's id impulses will be expressed unchecked and thus lead to trouble from the environment.

Moral anxiety arises from a fear that one will not conform to the standards of the conscience. What identifies and defines these anxieties is the source rather than the quality of the anxiety experience. The essential function of anxiety is to serve as a warning signal to the ego that certain steps must be initiated to quell the danger and thus protect the organism.

The Ego Defenses

We have already observed that the ego uses the secondary process of memory, judgment, and learning to solve problems and stave off environmental threats. But such measures are less serviceable when threats arise from within the person. When one fears the wrath of the superego or the unleashed lusts of the id, where does one turn? The answer lies in the *ego defenses*, or as they are sometimes called, *defense mechanisms*. Nowhere was the genius of Freud more evident than in his ability to abstract the defense mechanisms from the often disconnected and illogical verbalizations of his patients. These mechanisms are generally regarded as pathological because they divert psychic energy from more constructive activities and at the same time distort reality. All the defense mechanisms operate actively and involuntarily, without the person's awareness.

The basic ego defense is *repression*. This can be described as the banishment from consciousness of highly threatening sexual or aggressive material. In some instances, the process operates by preventing the offending impulse from reaching consciousness in the first place.

Fixation occurs when the frustration and anxiety of the next psychosexual stage are so great that the individual remains at his or her present level of psychosexual development.

Regression involves a return to a stage that earlier provided a great deal of gratification; this may occur following extensive frustration.

Reaction formation is said to occur when an unconscious impulse is consciously expressed, by its behavioral opposite. Thus, "hate you" is expressed as "I love you."]

Projection is revealed when one's unconscious feelings are attributed not to oneself but to another. Thus, he feeling "I hate you" is transformed into "You hate me."

There are, of course, other ego defense mechanisms also, but such detail is not required here as our main focus here is on the therapeutic application of psychoanalysis.

FROM THEORY TO PRACTICE:

Breuer's experiences with Anna O had led to the discovery of the talking Cure. This, in turn, became transformed into free association during Freud's work with Elisabeth. *Free association* meant simply that the patient was to say everything and anything that came to mind regardless of how irrelevant, silly, dull, or revolting it might seem. Freud also realized that Anna had transferred onto Breuer many of her feelings that really applied to significant males in her life. This notion of *transference* would eventually become a valuable diagnostic tool during therapy for understanding the nature of the patient's problems-especially the unconscious ones.

Through hypnosis, Freud learned that patients could relive traumatic events associated with the onset of the hysterical symptom. In some cases, this reliving served to release formerly mottled-up energy. This became known as *catharsis*-a release of energy that often had important therapeutic benefits. In his work with Elisabeth, Freud also witnessed *resistance*-a general reluctance to discuss, remember, or think about events that are particularly troubling or threatening. He viewed this as a kind of defense, but later he also analyzed it as repression-the involuntary banishing of a thought or impulse to the unconscious. The *unconscious*, of course, is the area of the mind inaccessible to conscious thought.

THE ROLE OF INSIGHT:

The ultimate goal of psychoanalytic intervention is the removal of debilitating neurotic problems. But the unswerving credo of the traditional psychoanalytic therapist is that, ultimately, the only final and effective way of doing this is to help the patient achieve *insight*. What does insight mean? It means total understanding of the unconscious determinants of those irrational feelings, thoughts, or behaviors that are producing one's personal misery. Once these unconscious reasons are fully confronted and understood, the

need for neurotic defenses and symptoms will disappear. All of the specific techniques have as their ultimate purpose the facilitation of insight.

An analysis culminating in insight is slow, tedious, and often very lengthy. An orthodox analysis is not measured in weeks or months but in years. This is so because the patient is not simply informed, for example, that unconscious feelings of hostility and competitiveness toward a long-departed father are causing present outbursts against friends, a boss, or coworkers. At an intellectual level, the patient may readily concede this interpretation. But the unconscious is not likely to be much affected by such sterile information. The patient must actually experience the unconscious hostility. This may happen through the transference process; early experiences associated with the father may be relived as competition with the therapist begins to occur. The analyst begins to seem like that father of years gone by, and all the old reactions start flooding back. As the therapist comes to stand for someone else (the father), old emotions are reexperienced and then reevaluated. From this comes a deeper insight.

The true meaning of this insight is then brought into the patient's consciousness by the *working-through process*. This refers to a careful and repeated examination of how one's conflicts and defenses have operated in many different areas of life. Little may be accomplished by a simple interpretation that one's passivity and helplessness are really an unconscious form of aggression. Once the basis for the interpretation is firmly laid, it must be repeated time and time again. The patient must be confronted with the insight as it applies to relations with a spouse, a friend, or a supervisor, and, yes, even as it affects reactions to the therapist. Patients must be helped to work through all aspects of their lives with this insight. This is not unlike learning a principle in a physics class. The principle only begins to take on real life and importance when one sees that it applies not just in a laboratory but everywhere—in automobile engines, house construction, baseball, and so on. So it is with insight. It comes alive when it becomes painfully clear in example after example how it has affected one's life and relationships. It is due in part to this extensive working-through period that traditional psychoanalysis takes so long—three to five therapy sessions per week for three to five years and sometimes much longer.

TECHNIQUES OF PSYCHODYNAMIC PSYCHOTHERAPY

The analysts regard the symptoms of neurosis as signs of conflict among the id, ego, superego, and the demands of reality. A phobia, an undesirable character trait, and excessive reliance on defense mechanisms are all signs of a deeper problem. The symptom, then, indicates an unconscious problem that needs resolution. Obviously, if patients could resolve their problems alone, they would not need therapy. But the very nature of unconscious problems and defenses makes self-healing exceedingly difficult. To dissolve defenses and confront the unconscious in a therapeutic relationship is the whole purpose of psychoanalysis. Over the years, many variations in techniques have been developed. However, in nearly all these variations, the basic emphasis on the dissolution of repressions through the reanalysis of previous experience. The fundamental goal remains freedom from the oppression of the unconscious through insight.

Free Association

A cardinal rule in psychoanalysis is that the patient must say anything and everything that comes to mind. This is not as easy for the patient as it appears to be at first glance. It requires the patient to stop censoring or screening thoughts that are ridiculous, aggressive, embarrassing, or sexual. All our lives we learn to exercise conscious control over such thoughts to protect both ourselves and others. According to Freud, however, if the therapist is to release patients from the tyranny of their unconscious and thereby free them from their symptoms and other undesirable behavior, then such an uncensored train of free associations is essential. From it, the patient and the therapist can begin to discover the long-hidden bases of the patient's problems.

Traditionally, the psychoanalyst sits behind the patient, who reclines on a couch. In this position, the analyst is not in the patient's line of vision and will not be as likely to hinder the associative stream. Another reason for sitting behind the client is that having patients stare at you six or more hours a day can be rather fatiguing for the analyst. The purpose of the couch is to help the patient relax and make it easier to free-associate.

The psychoanalyst assumes that one association will lead to another. *As* the process continues, one gets closer and closer to unconscious thoughts and urges. Any single set of associations may not be terribly clear. But over many sessions, patterns of associations start to emerge, and the analyst can begin to make sense out of them through their repetitive themes. In one sense, free associations are not really "free" at all. They are outgrowths of unconscious forces that determine the direction of one's associations. Often, but not always, these associations lead to early childhood memories and problems. Such memories of long-forgotten experiences give the analyst clues to the structure of personality and its development.

Analysis of Dreams

A related technique is the *analysis of dreams*. Dreams are thought to reveal the nature of the unconscious because they are regarded as heavily laden with unconscious wishes, albeit in symbolic form. Dreams are seen as symbolic wish fulfillments that often provide, like free associations important clues to childhood wishes and feelings. During sleep, one's customary defenses are relaxed and symbolic material may surface. Of course, censorship by the ego is not totally removed during sleep, or the material from the id would become so threatening that the person would quickly awaken. In a sense, dreams are a way for people to have their cake and eat it too. The material of the dream is important enough to provide some gratification to the id but not usually so threatening as to terrorize the ego. However, in some cases this scenario is not applicable, and traumatizing dreams do occur.

The *manifest content* of a dream is what actually happens during the dream. For example, the manifest content of a dream may be that one is confronted with two large, delicious-looking ice cream cones. The *latent content* of a dream is its symbolic meaning. In the preceding example, perhaps there is a message about the need for oral gratification or a longing to return to the mother's breast.

In order to get at the latent content the patient is often encouraged to free-associate to a dream with the hope of gaining insight into its meaning, normally, the manifest content is an amalgam of displacement. Condensation, substitution, symbolization, or lack of logic. It is not easy to cut through all this and find the latent meaning. Free association will help in this search, but the meaning of one dream alone is not always apparent. The real meaning of a dream in the life of an individual may only become apparent from the analysis of a whole series of dreams. Another problem is that patients often distort the actual content of a dream as they retell it during the analytic session. Thus, not only does the analyst have to delve deeply to find the symbolic meaning, but there is the added burden of the patient's waking defenses that strive to thwart the goal of understanding. For many analysts, dreams do not provide inevitable, final clues to validate with further information.

Analysis Of Resistance

During the course of psychotherapy, the patient will attempt to ward off efforts to dissolve neurotic methods of resolving problems. This characteristic defense, mentioned earlier, is called **resistance**. Patients are typically unwilling to give up behaviors that have been working, even though these behaviors may cause great distress – the distress, in fact, that led the patients to seek help in the first place. In addition, patients find painful subjects difficult to contemplate or discuss. For example, a male patient who has always feared his father or has felt that he did not measure up to his father's standards may not wish to discuss or even recall matters related to his father. Although a certain amount of resistance is to be expected from most patients, when the resistance becomes sufficient to retard the progress of therapy, it must be recognized and dealt with by the therapist.

Resistance takes many forms. Patients may begin to talk less, to pause longer or to report their minds are blank. Lengthy silences are also frequent. Sometimes a patient may repeatedly talk about point or endlessly repeat same material. Therapy may become an arena for discussing such problems as unemployment or taxes – weighty issues, but hardly the ones that brought the patient to therapy.

Some patients may intellectualize about the relative *merits* of primal screaming versus nude marathons or even the effect of Freud's boyhood on the subsequent development of psychoanalysis. If the patient knows that the therapist has a penchant for dreams, then the therapist may be deluged with dream material. In some

instances, the patient's feelings or ideas about the therapist may begin to dominate the sessions. This can be very flattering until the therapist realizes that this interest is just a way of avoiding the real problems. Another form of resistance is the tendency to omit or censor certain information.

Resistance is also evidenced when a patient repeatedly comes late, cancels appointments without good reason, and forgets meetings, and so on. The therapist may also begin to notice that a variety of "real" events in the patient's life seem to be conspiring against the sessions. For example, the patient may start to miss sessions because of a succession of physical illnesses or may constantly ask to change appointment times in order to meet one daily crisis after another.

Nearly anything can become a form of resistance. As the patient's defenses are addressed, there is sometimes an intensification of symptoms. But the opposite can also occur, so that an actual "flight into health" occurs-the patient gets better. It is almost as if, in the first instance, the patient is saying, "Don't make me confront these things, I'm getting worse."

In the second instance, the patient is saying, "See, I don't need to deal with these matters, I'm getting better." Another method is "acting out." Here the patient attempts to escape the anxiety generated in therapy by indulging in irrational acts or engaging in potentially dangerous behavior. For example, a patient suddenly takes up mountain climbing or begins to use cocaine or heroin. Still other patients flee into "intellectualization." Experiences or memories become stripped of their emotional content and are dissected calmly and rationally. Everything becomes cold and detached. Losing one's job becomes an occasion for an elaborate, intellectual discussion of economic conditions or the shift to high technology. Feelings are ignored, and the experience is handled by a flight into rationality.

In one form or another, resistance goes on throughout the course of therapy. In one sense, it is an impediment to the swift resolution of neurotic conflicts. But in another sense, it is the central task in therapy. The resistance that goes on in therapy probably mirrors what has happened in real life. If resistance during therapy can be analyzed and the patient made to understand its true function, then such defenses will not be as likely to operate outside the therapist's office.

Transference

A key phenomenon in psychoanalytic therapy is transference. To one degree or another, transference is operative in most individual forms of verbal psychotherapy. It occurs when the patient reacts to the therapist as if the latter represented some important figure out of childhood. Both positive and negative feelings can be transferred. In short, conflicts and problems that originated in childhood are reinstated in the therapy room. This provides not only important clues as to the nature of the patient's problems but also an opportunity for the therapist to interpret the transference in an immediate and vital situation. Many characteristics of the psychoanalytic session-the patient is seated on a couch facing away from the analyst, the analyst does not give advice or reveal personal information serve to encourage the establishment of transference.

Positive transference is often responsible for what appears to be, rapid improvement at the beginning stages of therapy. Being in a safe, secure relationship with a knowledgeable authority can produce rapid but superficial improvement. Later, as the patient's defenses are challenged, this improvement is likely to fade, and marked negative transference may intrude.

Transference can take many forms. It may be reflected in comments about the therapist's clothing or office furnishings. It may take the form of direct comments of admiration, dislike, love, or anger. It may assume the guise of an attack on the efficacy of psychotherapy or a helpless, dependent posture. The important point is that these reactions do not reflect current realities but have their roots in childhood. It is all too easy to view every reaction of the patient as a manifestation of transference. However, the truly sensitive therapist is one who can separate reactions that have some support in reality from reactions that are neurotic in character.

Basically, both positive and negative transferences are forms of resistance. Through interpretation, the patient is helped to recognize the irrational nature and origins of transference feelings. With repeated interpretation and analysis, the patient can begin to gain control over such reactions in the therapy room and learn to generalize such control to the real world as well.

Interpretation

Interpretation is the cornerstone of nearly every form of dynamic psychotherapy. Although the content may vary significantly, depending on the therapist's theoretical affiliation, the act of interpreting is perhaps the most common technique among all forms of psychotherapy. From the psychoanalyst's perspective, *interpretation* is the method by which the unconscious meaning of thoughts and behavior is revealed. In a broader sense, however, interpretation is a process by which the patient can be induced to view thoughts, behavior, feelings, or wishes in a different manner. It is a method calculated to free the patient from the shackles of old ways of seeing things ways that have led to the patient's current problems in living. It is a prime method for bringing about insight. Of course, significant insight or behavioral change rarely comes from a single interpretation. Rather, it is a slow, repetitive process in which the essential meaning behind certain behaviors, thoughts, and feelings is repeatedly pointed out to the patient in one context after another.

It is important to emphasize that interpretations are not sprinkled about like confetti. Rather, they are limited to important life areas those that relate directly to the problems that the therapist is trying to resolve. It is best to offer an interpretation when it is already close to the patient's awareness. In addition, an interpretation should be offered when it will arouse enough anxiety to engage the patient's serious contemplation but not so much anxiety that the patient will reject it.

Although therapists have sometimes been known to make interpretations as shots in the dark, it is generally wise to be reasonably sure of one's target before firing the salvo. Being wrong, offering an interpretation too soon, or providing an interpretation that is beyond what the patient is ready to accept is likely to be counterproductive. As Colby (1951) put it, "Like pushing a play ground swing at the height of its arc for optimum momentum, the best-timed interpretations are given when the patient, already close to it himself [sic], requires only a nudge to help him see the hitherto unseen".

As a general rule, small dosages are best. Therefore, rather than prepare one grand interpretation that will subsume all the major aspects of the patient's conflicts, it is advisable to approach matters gradually over a period of time. One can gradually move from questions to clarifications to interpretations. This will allow the patient to integrate each step. In making interpretations, it is important to build on what the patient has said previously, using the patient's own comments and descriptions to build the interpretive case.

It can be difficult to determine whether a specific interpretation has been effective. Sometimes the patient's response (for example, a surprised exclamation, flushing, saying "My God, I never thought of it that way!") will suggest that the target has been hit. But at other times patients may be entirely noncommittal, only to remark some sessions later how true the therapist's comment was. In any event, the real test of the utility of an interpretation is more likely to come from the subsequent course of the sessions. Even a patient's overt acceptance can sometimes be nothing more than a way of diverting the therapist or erecting a defense.

A classic psychoanalytic interpretation is designed to open up the patient to new ways of viewing things and, ultimately, to neutralize unconscious conflicts and defenses. In doing this, the therapist makes use of free associations, dream material, behavior that indicates resistance and transference, and so on.

PSYCHOANALYTIC ALTERNATIVES

Psychoanalytic theory underwent considerable modification by the Neo-Freudians, Alfred Adler, Carl Jung, Otto Rank, the ego analysts and others. The seminal contributions of Freud remained, but the emphases often changed. Jung made much more of dreams and symbolic processes. Rank elevated the birth trauma to a preeminent position. Adler and the neo-Freudians stressed the importance of culture, learning, and social relationships instead of instinctual forces.

Such variations would be expected to influence the methods of therapy. However, these changes often did little to alter the critical roles of free association, dream analysis, interpretation, transference, and resistance. The supreme role of insight was little changed. Insight came about through traditional psychoanalytic methods, but now it was the insight of Horney or Fromm or Sullivan. The neurotic symptom was seen as rooted not only in repressed sexual or aggressive urges; it now became the outgrowth of a fear of being alone or of the insecurity that goes along with the adult role. In most of these early variants of psychoanalysis, interpretation remained the essential therapeutic ingredient. What distinguished these variants was often the content of the interpretation—the different ways in which unconscious material was construed by the analyst.

Over the years, enough changes have been made in traditional psychoanalysis that those who no longer practice the strict Freudian techniques are often said to be practicing "psychoanalytically oriented" therapy. These changes involve many factors. In some cases, the number of analytic sessions is reduced from five per week to three, and the entire treatment process may last but a year and a half (Alexander & French, 1946). The therapist is no longer inevitably seated behind the patient's couch but now often sits at a desk with the patient seated in a facing chair. Perhaps the easiest way to characterize these and other modifications is to say that greater flexibility has been introduced. Although basic Freudian tenets are still observed, the overall context is not so rigid. For example, free association is no longer absolutely required by these psychoanalytically oriented therapists. The importance of dreams may be downplayed somewhat. Drugs and even hypnosis may be used.

For many years, the therapy room was like an inner sanctum. The therapist talked with the patient and no one else. Now, family members or a spouse are often consulted, or sometimes therapy is conducted with the family as a unit. There tends to be much less emphasis on the past (childhood) and a more active confrontation with the present. Even the nature of the clientele has changed a bit. Clinics or institutes now provide some therapeutic services to aging clients, minority group clients, and others who have not traditionally received psychoanalytic treatment. They have tried to open up therapy to nontraditional populations. Again, none of this is meant to be a denial of Freudian principles; rather, it is a demonstration that traditional Freudian treatment procedures are not the only therapeutic techniques that can be deduced from Freudian psychoanalytic theory.

EGO ANALYSIS:

The *ego* analysis movement originating from within the framework of traditional psychoanalysis rather than as a splinter group, held that classical psychoanalysis overemphasized unconscious or ego processes. This group of theorists accepted the role of the ego in mediating the conflict between the id and the real world but believed that the ego also performed other extremely important functions. They emphasized the adaptive, "conflict-free" functions of the ego, including memory, learning, and perception. These theorists include Hartmann (1939), Anna Freud (1946a), Kris (1950), Erikson (1956), and Rapaport (1953).

Ego-analytic psychotherapy has not departed from the usual therapy methods except in degree. In a sense, the ego analysts seem to prefer reeducative goals rather than the reconstructive goals of orthodox psychoanalysis. The exploration of infantile experience and the induction of a transference neurosis seem to be less common in ego-analytic therapy than in classical psychoanalysis. Ego-analytic therapy focuses more on contemporary problems in living than on a massive examination and reinstatement of the past. Also, the

therapist must understand not only the neurotic aspects of the patient's personality but also the effective parts and how they interact with those neurotic trends.

The ego-analytic approach has also tended to emphasize the importance of building the patient's trust through "reparenting" in the therapy relationship. This approach sometimes even views transference as an impediment to therapy and works toward building adaptive defenses in the patient (Blanck & Blanck, 1974).

OTHER CONTEMPORARY DEVELOPMENTS:

In particular, the work of Horney, Sullivan, and Adler has been important in giving a new spin to psychoanalysis. Likewise, ego psychology and theories of object relations have encouraged an emphasis on the manner in which the patient relates to other people, rather than on conflicts among instinctual forces. For example, object relations theorists see the need to form relationships with others as a primary influence on human behavior. Therefore, these theorists focus more on the role of love and hate, as well as *autonomy* and dependency, in the development of the self. In the self psychology of Kohut (1977), the central task of maturation is not the successful negotiation of the psychosexual stages but the development of an integrated self.

Discussions of changes in psychoanalytic therapies emphasize a shift in the therapeutic focus to the "here and now" and to the interpersonal exchanges that occur within it (Henry, Strupp, Schacht, & Gaston, 1994). Strupp and Binder (1984) have synthesized some of the more critical developmental changes in psychoanalytic practice. They emphasize a movement away from the recovery of childhood memories and their analysis toward a focus on the corrective emotional experiences that occur through *the* agency of the therapeutic relationship. The transference relationship as it occurs now helps provide the means for constructive changes in interpersonal relations outside the therapy room.

BRIEF PSYCHODYNAMIC PSYCHOTHERAPY:

Perhaps the chief practical thrust of recent years is psychodynamic therapy has been the development of brief methods (Goldfried, Greenberg, & Manna, 1990, Koss, Butcher, & Strupp, 1986). Many of these brief therapies retain their psychodynamic identity even as they are employed in emergency, crisis-oriented situations. This allows the therapist to capitalize on the patient's heightened motivation and also to depend on the transference relationship (Goldfried et al., 1990).

Although it would be nice to believe that theory and/or research considerations have dictated the shift toward briefer psychotherapies, this is not entirely the case. An important driving force has been the increasing focus on cost containment in health care systems (Cummings, 1986). Insurers have been cutting the number of visits for which they will reimburse therapists. Cost containment has also provided indirect competition from psychiatrists, who frequently prescribe medications rather than psychotherapy. The net effect has been a turn to *brief psychotherapy* to remain economically competitive.

There are now several hundred different brands of brief therapy. In fact, the widespread availability of these treatments has diminished the exclusive role of psychiatrists and brought many non medical therapists into the arena. Not all of these briefer therapies could be labeled psychodynamic. In some cases, briefer therapies are highly similar to crisis intervention techniques. Finally, many forms of brief psychotherapy are quite eclectic in their approach (Garfield, 1989).

Although some define 25 sessions as the upper limit of brief therapy, others indicate that the range can be from one session to 40 or 50. However, the issue seems less the number of sessions than the rationing of time allotted to therapy (Budman & Gunman, 1983) and the state of mind in patient and therapist alike.

Events move rapidly in crisis-oriented therapy. Thus, the quest for insight is not the leisurely process that it is in traditional forms of psychotherapy. The entire working through process is accelerated. The ultimate goal is not reconstruction of the personality, but the development of a benign cycle of functioning and the better handling of day to day problems in living. Transference is encouraged, but mainly as a means of ensuring that the therapist will be perceived as helpful, competent, and active.

Specific techniques in brief therapy are numerous. However, the maintenance of a clear and specific focus on realistic goals is important. Usually, the level of therapist activity is high, and both therapist and patient are keenly aware of the element of time. The therapist is likely to use homework assignments for the patient. To involve relatives or significant others in the treatment plan. Supportive activities outside therapy are likely to be used *well* (for example, exercise, Overeaters Anonymous). There tends to be a great deal of flexibility in treatment activities that take brief therapy beyond the strict psychodynamic perspective.

Research evidence attests to the efficacy of brief forms of psychotherapy across a number of clinical conditions (Koss & Shiang, 1994), and evidence suggests that brief psychodynamic psychotherapy may be as effective as traditional time unlimited psychoanalysis.

INTERPERSONAL PSYCHOTHERAPY; AN EMPIRICALLY SUPPORTED TREATMENT:

A particular form of brief therapy that is psychodynamic in flavor deserves mention. It has received a great deal of attention from psychotherapy researchers, and it has been highlighted in several practice guidelines. *Interpersonal psychotherapy or IPT* is a brief insight oriented approach that has been applied primarily to depressive disorders although it has been modified for use in the treatment of other disorders (such as substance abuse and bulimia) as well. When used to treat depression, IPT involves thorough assessment of depressive symptoms, targeting a major problem area (such as delayed grief, role transitions or disputes, or interpersonal deficits), and alleviating depressive symptoms by improving relationships with other improving communication skills and social skills). IPT has been shown to be effective in treating acute depressive episodes and in preventing or delaying the recurrence of depressive episodes. Given below are the major features and characteristics of IPT.

FEATURES OF INTERPERSONAL PSYCHOTHERAPY:

IPT is a brief form of psychodynamic psychotherapy that has been used in numerous research studies. It is one of the treatments cited as examples of empirically validated/ supported treatments by the Division 12 Task Force of the American Psychological Association. Weissman and Markowitz (1998) discuss the primary features of IPT.

Focus:

IPT focuses on the connection between onset of clinical problems and current interpersonal problems (with friends, partners, and relatives). Current social problems are addressed, not enduring personality traits or styles.

Length: Typically 12-16 weeks.

Role Of The IPT Therapist:

IPT therapists are active, not neutral, and supportive. They use realism and optimism to counter patients' typically negative and pessimistic outlook. Therapists emphasize the possibility for change and highlight options that may effect positive change.

PHASE OF TREATMENT:

1. **First phase (up to 3 sessions):** This includes a diagnostic evaluation and psychiatric history, an interpersonal functioning assessment, and patient education about the nature of the clinical condition (such as depression). The therapist provides a clinical formulation of the patient's difficulties by linking symptoms to current interpersonal problems, issues, and situations.

2. **Second phase:** Depending on which interpersonal problem area has been chosen (for example, grief, role disputes, role transition, and interpersonal deficits), specific strategies and goals are pursued. For example, treatment focusing on role disputes would aim to help the patient explore the problematic relationships, the nature of the problems, and the options for resolving them. If an impasse has been reached in a relationship, the therapist helps the patient find *ways* to circumvent whatever is hindering progress or to end the relationship.

3. **Third phase (last 2-3 sessions):** The patient's progress and mastery experiences are reinforced and consolidated. The IPT therapist reinforces the patient's sense of confidence and autonomy. Methods of dealing with a recurrence of clinical symptoms are discussed.

EVALUATION OF PSYCHODYNAMIC PSYCHOTHERAPY:

In this section, we will review the available empirical evaluations and offer some general observations about those psychotherapeutic practices that trace their origins to the psychoanalytic method.

DOES PSYCHODYNAMIC PSYCHOTHERAPY WORKS?

What evidence is there that the psychodynamic approach is effective? We know the widely known meta-analytic study by Smith, Glass, and Miller (1980) that examined the effectiveness of psychotherapy. In addition to examining the effects of psychotherapy in general, these authors also reported effects separately for different types of psychological intervention. They found that the average patient who had received psychodynamic psychotherapy was functioning better than 75%, of those who had received no treatment. Two recent meta-analyses of studies examining the effectiveness of brief psychodynamic psychotherapy have produced conflicting results, with one supporting the efficacy of brief *psychodynamic* treatment (Crits-Christoph, 1992) but the other not (Svartberg & Stiles, 1991). Based on these and other results, we offer the tentative conclusion that there appears to be at least modest support for the effectiveness of psychodynamic psychotherapy. However, a number of thorny methodological issues plague research on psychodynamic therapy (for example, appropriate outcome measures, length of treatment), and additional investigations are warranted.

INTERPRETATION AND INSIGHT:

A wide range of current psychotherapies depend to a greater or lesser extent on the patient's achieving insight through therapist interpretation. Psychoanalysis seems to retain its total commitment to insight as the supreme means for solving problems in living. When understanding is complete enough, it is believed that the patients' symptoms will be ameliorated, or even disappear entirely.

This emphasis on the pursuit of understanding has great appeal to many people. For example, although many people who are sad may seek the therapeutic goal of happiness, most of them are not content just to become happy they also want to know why they are sad. The commitment of psychoanalysis and its psychotherapeutic heirs to insight and understanding is their greatest asset, but it also contains the seeds of their failures. Especially in the case of psychoanalysis, reconstruction of the personality through insight and understanding can lead to a nearly interminable and sometimes exhausting examination of the past and analysis of motives. Although one can hardly fault psychoanalysis for teaching the importance of the past in shaping the present, there can be too much of a good thing. At times, it almost seems that the patient can use the need for understanding and the pursuit of the past as reasons not to come to grips with current problems. The endless analysis of conflicts and motives and of their childhood origins can easily replace the need to find solutions and behavioral alternatives to problems in living. Although learning the reasons for one's problems may be important (and ultimately efficient if one is to attain generalized rather than piecemeal solutions), the failure to emphasize alternative ways of behaving can be a major shortcoming of traditional psychoanalysis.

Psychoanalysis often appears to involve a tacit assumption that more adaptive behavior will occur automatically once insight is achieved by the working through process that behavioral change will surely follow insight. However, the evidence for this assumption is exceedingly sparse. In fact, it has been argued for some time that the true course of events follows a reverse pattern that insight is brought about by behavioral change (Alexander & French, 1946).

One of the chief methods used by psychodynamic clinicians to facilitate patient insight is the interpretation of transference. A recent review of empirical studies that examined transference interpretation in psychodynamic psychotherapy (W. P. Henry et al., 1994) offers the following general conclusions:

1. The frequency of interpretations made is not related to better outcome. Indeed, some studies have found that a higher frequency of interpretation is related to poorer outcome.
2. Transference interpretations do not result in a greater degree of affective experience in the patient as compared with other types of interpretations or other types of interventions. When followed by affective responses, however, transference interpretations appear to be related to positive outcome.
3. Interpretations by the therapist are more likely to result in defensive responding on the part of the patient than are other types of interventions. Frequent transference interpretations may damage the therapeutic relationship.
4. Clinicians' accuracy of interpretations may be lower than was previously believed.

The authors summarize: "The available findings challenge some clearly held beliefs. In short, transference interpretations do not seem uniquely effective, may pose greater process risks, and may be counter therapeutic under certain conditions" (W. P. Henry et al., 1994, p. 479).

This is not to say that transference interpretations are always harmful and should be avoided. Rather, the existing research suggests that the relationship between interpretation and outcome is a complex one that is likely to depend on factors such as patient characteristics, clinician interpersonal style, timing of interpretations, and accuracy of interpretations (W. P. Henry et al., 1994).

CURATIVE FACTORS:

What, then, seems to be responsible for positive outcomes following psychodynamic psychotherapy? The empirical evidence points to the, strength of the therapeutic alliance (W. P. Henry et al., 1994). Although the quality of the therapeutic alliance is related to outcome across a number of therapeutic modalities (for example, client-centered, cognitive-behavioral), it is interesting to note that the importance of the clinician-patient relationship was recognized by Freud (1912/1966). Although various definitions of the therapeutic alliance have been proposed, this term is generally used to refer to the patient's affective bond to the therapist. A positive relationship or strong bond facilitates self examination by the patient and permits interpretation. Presumably, a strong therapeutic alliance makes it less likely that a patient will react defensively to interpretations by the clinician. Research evidence suggests a direct link between alliance and outcome, whether short-term or long-term psychodynamic treatments are examined and regardless of the particular outcome measure used (M. P. Henry et al., 1994).

THE LACK OF EMPHASIS ON BEHAVIOR:

The stereotypic practitioner of psychoanalytic psychotherapy plays a relatively passive role except for interpretation. The failure to deal with behavior to make suggestions or to adopt a generally more activist posture would seem to prolong psychotherapy unnecessarily. For example, it may be true that a male patient's unhappy heterosexual adjustment or lack of skills with women stems from unconscious generalizations from past unfavorable comparisons with a dominant brother. But simple insight into the childhood origins of the problem does not provide the skills that are lacking. The patient's expectations for success in establishing relationships with women will continue to be low and a source of anxiety until a heterosexual behavioral repertoire is established. An active therapist who not only provides interpretations that will lead to insight but also guides the patient into new learning situations seems more likely to achieve lasting solutions to the patient's problems than does a therapist who relies solely on insight. (Or solely on behavior, for that matter).

It seems clear that a major reason for the rapid rise of the behavioral therapies was the failure of so many psychotherapists to deal directly with the specific problems of the patient. The approach inevitably seemed to be one of relegating the presenting problem to the status of a "symptom of something deeper." The

therapist then began working with that "something deeper" while clinging to the abiding belief that once the patient understood it, the symptom or deficit would disappear. Unfortunately, things did not work out that way often enough. In any case, more and more therapists are trying to foster both insight and behavioral alternatives in their patients.

THE ECONOMICS OF PSYCHOTHERAPY:

By its very nature (reconstruction of the personality), psychoanalysis is a long and costly procedure. Its course over three to five years and the long and costly preparation of its practitioners ensure that it will be an expensive undertaking. Consequently, it has become a therapy for the affluent for those who have both the money and the time to pursue the resolution of their neuroses. Moreover, the procedures of psychoanalysis are such that only relatively intelligent, sophisticated, and educated groups are likely to *be* able to accept the therapeutic demands it makes. For all these reasons, only a small portion of those in need of psychotherapy are likely to be reached by traditional psychoanalysis. The poor, the undereducated, minority groups, older populations, the severely disturbed, and those beset by reality burdens of living for which they are woefully unprepared will in all likelihood not become psychoanalytic patients.

For these reasons alone, many regard psychoanalysis as a failure. It is inherently incapable of putting even a dent in the mental health problems of the nation. Yet, for persons who have the necessary personal qualities and financial resources, psychoanalysis has been helpful, particularly for those whose problems can best be met through the development of understanding.

Psychoanalytic techniques seem to have helped many patients, and as a theory of therapy, psychoanalysis undergirds many forms of psychotherapy. Yet many clinicians still question whether, after all these years, there is really much in the way of definitive research evidence for its effectiveness. These sentiments are echoed by Wolpe (1981). Although hardly unbiased, Wolpe is particularly critical of a method that can allow patients to remain so long in therapy, often with little evidence of improvement. Wolpe cites examples offered by Schmideberg (1970). In one case, a 54-year-old man had been in psychoanalysis for 30 years without noticeable improvement. A woman who began psychoanalysis with no specific symptoms later developed agoraphobia and after 12 years of therapy was worse than when she began. Admittedly, nearly every brand of therapy contains its share of horror stories. But lengthy therapy combined with little improvement does raise questions.

It is encouraging, however, that brief forms of psychodynamic psychotherapy have been developed. Crits-Christoph (1992) meta-analysis indicates that brief psychodynamic treatments that incorporate the use of manuals show stronger treatment effects (versus psychodynamic treatments that do not use manuals) and in some cases may be equivalent to other forms of brief psychological treatment. In addition to providing encouragement to psychodynamically oriented clinicians, this finding should serve to impel them toward mastery and use of manual based, empirically supported brief psychodynamic treatments, such as interpersonal psychotherapy (Markowitz, 1998). This approach is both scientifically defensible and appealing to managed care companies.

CLIENT CENTERED THERAPY

Person-centered therapy, which is also known as client-centered, non-directive, or Rogerian therapy, is an approach to counseling and **psychotherapy** that places much of the responsibility for the treatment process on the client, with the therapist taking a nondirective role.

PURPOSE:

Two primary goals of person-centered therapy are increased self-esteem and greater openness to experience. Some of the related changes that this form of therapy seeks to foster in clients include closer agreement between the client's idealized and actual selves; better self-understanding; lower levels of defensiveness, guilt, and insecurity; more positive and comfortable relationships with others; and an increased capacity to experience and express feelings at the moment they occur.

BACKGROUND:

Developed in the 1930s by the American **psychologist Carl Rogers**, client-centered therapy departed from the typically formal, detached role of the therapist emphasized in **psychoanalysis** and other forms of treatment. Rogers believed that therapy should take place in a supportive environment created by a close personal relationship between client and therapist. Rogers's introduction of the term "client" rather than "patient" expresses his rejection of the traditionally hierarchical relationship between therapist and client and his view of them as equals. In person-centered therapy, the client determines the general direction of therapy, while the therapist seeks to increase the client's insight and self-understanding through informal clarifying questions.

Beginning in the 1960s, person-centered therapy became associated with the human potential movement. This movement, dating back to the beginning of the 1900s, reflected an altered perspective of human nature. Previous psychological theories viewed human beings as inherently selfish and corrupt. For example, Freud's theory focused on sexual and aggressive tendencies as the primary forces driving human behavior. The human potential movement, by contrast, defined human nature as inherently good. From its perspective, human behavior is motivated by a drive to achieve one's fullest potential.

Self-actualization, a term derived from the human potential movement, is an important concept underlying person-centered therapy. It refers to the tendency of all human beings to move forward, grow, and reach their fullest potential. When humans move toward self-actualization, they are also pro-social; that is, they tend to be concerned for others and behave in honest, dependable, and constructive ways. The concept of self-actualization focuses on human strengths rather than human deficiencies. According to Rogers, self-actualization can be blocked by an unhealthy self-concept (negative or unrealistic attitudes about oneself).

Rogers adopted terms such as "person-centered approach" and "way of being" and began to focus on personal growth and self-actualization. He also pioneered the use of encounter groups, adapting the sensitivity training (T-group) methods developed by Kurt Lewin (1890-1947) and other researchers at the National Training Laboratories in the 1950s.

While person-centered therapy is considered one of the major therapeutic approaches, along with psychoanalytic and **cognitive-behavioral therapy**, Rogers's influence is felt in schools of therapy other than his own. The concepts and methods he developed are used in an eclectic fashion by many different types of counselors and therapists.

PROCESS:

Rogers believed that the most important factor in successful therapy was not the therapist's skill or training, but rather his or her attitude. Three interrelated attitudes on the part of the therapist are central to the success of person-centered therapy: congruence; unconditional positive regard; and empathy.

Congruence refers to the therapist's openness and genuineness—the willingness to relate to clients without hiding behind a professional facade. Therapists who function in this way have all their feelings available to them in therapy sessions and may share significant emotional reactions with their clients. Congruence does *not* mean, however, that therapists disclose their own personal problems to clients in therapy sessions or shift the focus of therapy to themselves in any other way.

Unconditional positive regard means that the therapist accepts the client totally for who he or she is without evaluating or censoring, and without disapproving of particular feelings, actions, or characteristics. The therapist communicates this attitude to the client by a willingness to listen without interrupting, judging, or giving advice. This attitude of positive regard creates a non-threatening context in which the client feels free to explore and share painful, hostile, defensive, or abnormal feelings without worrying about personal rejection by the therapist.

The third necessary component of a therapist's attitude is **empathy** ("accurate empathetic understanding"). The therapist tries to appreciate the client's situation from the client's point of view, showing an emotional understanding of and sensitivity to the client's feelings throughout the therapy session. In other systems of therapy, empathy with the client would be considered a preliminary step to enabling the therapeutic work to proceed; but in person-centered therapy, it actually constitutes a major portion of the therapeutic work itself. A primary way of conveying this empathy is by active listening that shows careful and perceptive attention to what the client is saying. In addition to standard techniques, such as eye contact, that are common to any good listener, person-centered therapists employ a special method called **reflection**, which consists of paraphrasing and/or summarizing what a client has just said. This technique shows that the therapist is listening carefully and accurately, and gives clients an added opportunity to examine their own thoughts and feelings as they hear them repeated by another person. Generally, clients respond by elaborating further on the thoughts they have just expressed.

According to Rogers, when these three attitudes (congruence, unconditional positive regard, and empathy) are conveyed by a therapist, clients can freely express themselves without having to worry about what the therapist thinks of them. The therapist does not attempt to change the client's thinking in any way. Even negative expressions are validated as legitimate experiences. Because of this nondirective approach, clients can explore the issues that are most important to them—not those considered important by the therapist. Based on the principle of self-actualization, this undirected, uncensored self-exploration allows clients to eventually recognize alternative ways of thinking that will promote personal growth. The therapist merely facilitates self-actualization by providing a climate in which clients can freely engage in focused, in-depth self-exploration.

APPLICATION:

Rogers originally developed person-centered therapy in a children's clinic while he was working there; however, person-centered therapy was not intended for a specific age group or subpopulation but has been used to treat a broad range of people. Rogers worked extensively with people with **schizophrenia** later in his career. His therapy has also been applied to persons suffering from depression, anxiety, alcohol disorders, cognitive dysfunction, and **personality disorders**. Some therapists argue that person-centered therapy is not effective with non-verbal or poorly educated individuals; others maintain that it can be successfully adapted to any type of person. The person-centered approach can be used in individual, group, or **family therapy**. With young children, it is frequently employed as **play therapy**.

There are no strict guidelines regarding the length or frequency of person-centered therapy. Generally, therapists adhere to a one-hour session once per week. True to the spirit of person-centered therapy, however, scheduling may be adjusted according to the client's expressed needs. The client also decides when to terminate therapy. Termination usually occurs when he or she feels able to better cope with life's difficulties.

POSITIVE RESULTS:

The expected results of person-centered therapy include improved self-esteem; trust in one's inner feelings and experiences as valuable sources of information for making decisions; increased ability to learn from (rather than repeating) mistakes; decreased defensiveness, guilt, and insecurity; more positive and comfortable relationships with others; an increased capacity to experience and express feelings at the moment they occur; and openness to new experiences and new ways of thinking about life.

Outcome studies of humanistic therapies in general and person-centered therapy in particular indicate that people who have been treated with these approaches maintain stable changes over extended periods of time; that they change substantially compared to untreated persons; and that the changes are roughly comparable to the changes in clients who have been treated by other types of therapy. Humanistic therapies appear to be particularly effective in clients with depression or relationship issues. Person-centered therapy, however,

appears to be slightly less effective than other forms of humanistic therapy in which therapists offer more advice to clients and suggest topics to explore.

Limitations:

If therapy has been unsuccessful, the client will not move in the direction of self-growth and self-acceptance. Instead, he or she may continue to display behaviors that reflect self-defeating attitudes or rigid patterns of thinking.

Several factors may affect the success of person-centered therapy. If an individual is not interested in therapy (for example, if he or she was forced to attend therapy), that person may not work well together with the therapist. The skill of the therapist may be another factor. In general, clients tend to overlook occasional therapist failures if a satisfactory relationship has been established. A therapist who continually fails to demonstrate unconditional positive regard, congruence, or empathy cannot effectively use this type of therapy. A third factor is the client's comfort level with nondirective therapy. Some studies have suggested that certain clients may get bored, frustrated, or annoyed with a Rogerian style of therapeutic interaction.

THE HUMANISTIC EXISTENTIAL MOVEMENT:

The strands of phenomenology, humanism, and existentialism in psychology are inextricably woven together. We know the importance that Rogers attached to immediate experience. This is basic phenomenology. At the same time, client-centered approaches stress the worth, uniqueness, and dignity of the client. This is basic humanism. Before we proceed to discuss existential therapies, logotherapy, and Gestalt therapy, let us pause to acknowledge the humanistic tradition that pervades those therapies.

HUMANISM:

Although humanistic psychology is a fairly recent development, its origins extend far back into philosophy and the history of psychology. When one speaks of humanism, one thinks of psychologists such as Allport, Goldstein, James, Murray, and Rogers. The values that humanism contributes to psychology are not rooted in the determinism of either psychoanalysis or behaviorism. From a humanist perspective, people are not products of the past, the unconscious, or the environment. Rather, they exercise free choice in the pursuit of their inner potential and self actualization. They are not fragmented patchworks of cognitions, feelings, and aspirations; rather, they are unified, whole, and unique beings. To understand is to appreciate those qualities, and this understanding- can only be achieved by an awareness of the person's experience. So-called scientific constructs based on norms, experiments, or data must give way to intuition and empathy. The emphasis is not on sickness, deviations, or diagnostic labels, but on positive striving, self-actualization freedom and naturalness. In one form or another humanism is expressed as a resistance to the positivistic determinism of science and as an active embrace of the essential humanity of people.

EXISTENTIAL THERAPY:

Existential psychology rejects the mechanistic views of the Freudians and instead sees people as engaged in a search for meaning. At a time when so many people are troubled by the massive problems of a technological society and seek to repair their alienated modes of living, existentialism has gained great popularity. It seems to promise the restoration of meaning to life, an increased spiritual awakening, and individual growth that will bring freedom from the conventional shackles created by a conformist society.

Hardly a unified movement that speaks with a single voice, the existential view actually turns out to be many views. When we discuss the psychological applications of existentialism, such names as Binswanger, Boss, Gendlin, Frankl, May, and Laing come to mind. Philosophically, existentialism springs from the same sources as does phenomenology.

The existentialists make a number of assertions about human nature. Basic to all is a fundamental human characteristic: the search for meaning). That search is carried out through imagination, symbolization, and judgment. All of this occurs in a matrix of participation in society. From the *standpoint* of their physical, environment and their biological environment, people function in a social context.

A crucial facet of personality is decision making, which involves the world of both facts and possibilities. Thus, personality is not just what one is a biological, social, and psychological being but also what one might become.

Many existentialists believe that decision making involves a set of inevitable choices. One can choose the present (the status quo), which represents lack of change and a commitment to the past. That choice will lead to guilt and remorse over missed opportunities. But one can also choose alliance with the future.

That choice propels the person into the future with an anxiety that stems from one's inability to predict and control the unknown. Such experiences of guilt and anxiety are not learned, but are part of the essence of living. It requires courage to choose the future and suffer the inevitable anxieties that this choice entails. A person can find that courage by having faith in self and by recognizing that choosing the past will inevitably lead to a guilt that is even more terrifying than anxiety.

THE GOALS OF THERAPY:

The ultimate goal of existential psychotherapy is to help the individual reach a point at which awareness and decision making can be exercised responsibly. The exercise of cognitive abilities will allow for the achievement of higher states of love, intimacy, and constructive social behavior. Through therapy, one must learn to accept responsibility for one's own decisions and to tolerate the anxiety that accumulates as one moves toward change. This involves self-trust and also a capacity to accept those things in life that are unchangeable or inevitable.

Techniques:

Existential therapy does not emphasize techniques. Too often, techniques imply that the client is an object to which those techniques are applied. Instead, the emphasis is on understanding and on experiencing the client as a unique essence. Therapy is an encounter that should enable the client to come closer to experience.

By experiencing self, the client can learn to attach meaning and value to life. Sometimes the therapist will confront the client with questions, questions that force the client to examine the reasons for failure to search for meaning in life. For example, a client who repeatedly complains that his job is not very fulfilling may be asked *why* he does not search for other employment or return to school for more training.

Such questions may force the client to examine his orientation toward the past more closely, and this, in turn, creates feelings of guilt and a sense of emptiness. Gendlin (1969, 1981) discusses focusing as a means of reaching the pre-conceptual, felt sense. This is achieved by having clients focus on the concretely felt bodily sense of what is troubling them. Silences are encouraged to help accomplish this. However, very few research studies have been published that evaluate the effectiveness of focusing in treating clients; its efficacy, therefore, remains to be established (Greenberg et al., (994)

Logo therapy:

One of the most widely known forms of existential therapy is logotherapy. This technique encourages the client to find meaning in what appears to be a callous, uncaring, and meaningless world. Viktor Frankl developed the technique. His early ideas were shaped by the Freudian influence. However, he moved on an existential framework as he tried to find ways of dealing with experiences in Nazi concentration camps. He lost his mother, father, brother, and wife to the Nazi Holocaust and was himself driven to the bunk of death (Frankl, 1963).

It seemed to him that the persons who could not survive these camps were those who possessed only the conventional meanings of life to sustain them. But such conventional meanings could not come to grips with the realities of the Nazi atrocities. Therefore, what was required was a personal meaning for existence. From his wartime experiences and the existential insights that he felt permitted him to survive, Frankl developed logotherapy (the therapy of meaning) Frankl's views about personality and his ideas about the goals of therapy are generally quite consonant with our previous discussion of existentialism. However, it is not always clear that logotherapy techniques bear any close or rational relationship to the theory.

Logotherapy is designed not to replace but to complement more traditional psychotherapy. However, when the essence of a particular emotional problem seems to involve agonizing over the meaning or the futility of life, Frankl regards logotherapy as the specific therapy of choice. Logotherapy then strives to inculcate a sense of the client's own responsibility and obligations to life (once the latter's meaning has been unfolded).

Frankl makes much of responsibility, regarding it as more important than historical events in the client's life. What is crucial is the meaning of the present and the outlook for the future.

In particular, two techniques described by Frankl (1960) have gained considerable exposure. ***Paradoxical intention*** is a popular technique in which the client is told to consciously attempt to perform the very behavior or response that is the object of anxiety and concern. Fear is thus replaced by a paradoxical wish. For example, suppose that a client complains that she is fearful of blushing when she speaks before a group. She would be instructed to try to blush on such occasions. According to Frankl, the paradoxical fact is that she will usually be unable to blush when she tries to do what she fears she will do. Typically, the therapist tries to handle all of this in a light tone. For example, in the case of a client fearful of trembling before his instructor, Frankl (1965) instructs the client to say to himself: "Oh, here is the instructor! Now I'll show him what a good trembler I am-I'll really show him how nicely I can tremble".

The second technique, ***de-reflection***, instructs the client to ignore a troublesome behavior or symptom. Many clients are exquisitely attuned to their own responses and bodily reactions. Dereflection attempts to divert the client's attention to more constructive activities and reflections.

Gestalt Therapy

In Gestalt therapy the emphasis is on present experience and on the immediate awareness of emotion and action. "Being in touch" with one's feeling replaces the search for the origins of behavior. Existential problems expressed by a failure to find meaning in life have arisen in a technological society that separates people from themselves. Gestalt therapy promises to restore the proper balance.

CONCLUDING COMMENTS:

These approaches of treatment including Client centered, Existential and Humanistic have made several noteworthy contributions to the field of psychotherapy. Clients' internal experience, feelings, free will, and growth potential have been brought to the forefront. Demonstrating the importance of the therapeutic relationship and of rapport is another major contribution.

However, these forms of therapy also present some problems. The sometimes prejudicial language used implies that other approaches are insensitive and harmful. Feelings seem to be overemphasized, and behavior underemphasized. Obscure and jargon language is often used, and there is a strong bias against empirical research and formal assessment. How these forms of treatment will be modified, or if they will even survive in their present form, remains to be seen. A number of trends (such as managed behavioral health care) pose threats to the popularity and utility of these forms of psychotherapy.

GESTALT THERAPY METHODS AND PROCEDURES

Gestalt is a German word referring to wholeness and the concept that a whole unit is more than the sum of its parts. Gestalt therapy was developed in the 1940s and 1950s by Frederick (Fritz) Perls, a German-born psychiatrist who immigrated to the United States. Like person-centered therapy, Gestalt therapy tries to make individuals take responsibility for their own lives and personal growth and to recognize their capacity for healing themselves. However, Gestalt therapists are willing to use confrontational questions and techniques to help clients express their true feelings. In the following example, the therapist helps the client become more aware of her own behavior and her responsibility for it:

DEFINITION:

Gestalt therapy is a complex psychological system that stresses the development of client self-awareness and personal responsibility.

PURPOSE:

The goal of Gestalt therapy is to raise clients' awareness regarding how they function in their environment (with family, at work, school, and friends). The focus of therapy is more on what is happening (the moment-to-moment process) than what is being discussed (the content). Awareness is being alert to what are the most important events in clients' lives and their environment with full sensorimotor, emotional, cognitive, and energy support. Support is defined as anything that makes contact with or withdrawal from with the environment possible, including energy, body support, breathing, information, concern for others, and language, for example.

In therapy, clients become aware of what they are doing, how they are doing it, and how they change themselves, and at the same time, learn to accept and value themselves. Individuals, according to this approach, define, develop, and learn about themselves in relationship to others, and that they are constantly changing.

ORIGIN AND DEVELOPMENT OF GESTALT THERAPY:

The theory of Gestalt therapy has three major sources. First is psychoanalysis, which contributed some of its major principles concerned with the inner life. Humanistic, holistic, phenomenological and existential writings, which center on personal experience and everyday life, constitute a second source. Gestalt psychology, the third source, gave to Gestalt therapy much more than its name. Though Gestalt therapy is not directly an application or extension of it, Gestalt psychology's thoroughgoing concentration on interaction and process, many of its important experimental observations and conclusions, and its insistence that a psychology about humans include human experience have inspired and informed Gestalt therapy.

Gestalt therapy emerged from the clinical work of two German psychotherapists, Frederick Salomon Perls, and Laura Perls. Frederick Perls, known to many of his students as Fritz, was trained as a psychiatrist. He worked with Kurt Goldstein, a principal figure of the holistic school of psychology, in his inquiries into the effects of brain injuries on veterans of the First World War. Later, in the 1920s; he trained in psychoanalysis with Karen Homey and Wilhelm Reich. Laura Perls--she adopted the anglicized spelling after she came to the United States--studied with the existential philosopher Martin Heidegger and was awarded a doctorate in psychology for her graduate studies. The most important of her teachers was the Gestalt psychologist Max Wertheimer. F. S. and Laura Perls fled Western Europe in 1933 ahead of the onslaught of Nazism to Johannesburg, South Africa, where they practiced until the termination of hostilities in 1945.

Gestalt therapy is "unpredictable" in that the therapist and client follow moment-to-moment experience and neither knows exactly where this will take them. Gestalt therapy is complex and intuitive, but it is based on the following principles:

Holism. Gestalt therapy takes into account the whole person including thoughts, feelings, behavior, body sensations, and dreams. The focus is on integration, that is, how the many parts of the person fit together, and how the client makes contact (interacts) with the environment.

Field theory. According to this theory, everything is related, in flux, interrelated, and in process. The therapist focuses on how the client makes contact with the environment (family, work, school, friends, and authority figures).

The figure-formation process describes how individuals organize or manipulate their environment from moment to moment.

Organismic self-regulation is the creative adjustment that the organism (person) makes in relation to the environment. The person's equilibrium with his or her environment is "disturbed" by the emergence of a client need, sensation, or interest and is related to the figure-formation process in that the need of the person organizes the field. For example, if an individual wants coffee, this coffee need is what comes out of the defused background and becomes "figural" (comes to the forefront of the client's environment or field) and when the individual enters a room, the "figural" will be related to the coffee need. The therapist is interested in what is "figural" for a person because it may provide insight into the person's need(s).

The Now. The concept of the here and now is what is being done, thought, and felt at the moment, and not in the past or the future.

Unfinished business is defined as the unexpressed feelings that are associated with distinct memories and fantasies. These feelings may be resentment, rage, hatred, pain, anxiety, **grief**, guilt, and abandonment that are not fully experienced in awareness, linger in the background, and are carried into the present life and cause preoccupations, compulsive behaviors, wariness, and other self-defeating behaviors. Unfinished business will persist until the person faces and deals with these denied or alienated feelings.

The current practice of Gestalt therapy includes treatment of a wide range of problems and has been successfully employed in the treatment of a wide range of "psychosomatic" disorders including migraine, ulcerative colitis, and spastic neck and back. Therapists work with couples and families, and with individuals who have difficulties coping with authority figures. In addition, Gestalt therapy has been used for brief **crisis intervention**, to help persons with **post-traumatic stress disorders**, alcohol and drug abuse, depression, or anxiety disorders; with adults in a poverty program; with seriously mentally ill individuals with psychotic disorders; and those with borderline **personality disorders**.

DESCRIPTION METHODS AND PROCEDURES

STAGES IN A GESTALT THERAPY SESSION AND AN EXAMINATION OF COUNSELOR INTERVENTIONS

Introduction

Gestalt therapy alerts us to the interrelationship between awareness and energy. When awareness is scattered and bound up in unknown feelings and thoughts, energy flow is diminished throughout one's personality. A Gestalt counselor, by suggesting the practice of certain "experiments" in awareness focusing, aids and amplifies a client's effort to free him- or herself from energy blocks mentally, emotionally, and physically. From this perspective, every psychological problem can be explored and resolved as a polarized conflict between two aspects in personality. Four stages in the unfolding of a therapeutic session and corresponding counselor behaviors which serve to guide a conflict into awareness expose its ramifications in a client's external and internal experience, and aid in its resolution will be examined.

Stage 1: Emergence of the Problem

Each client, each session is unique -- interplay of skill, experience, levels of growth, actual needs and random factors present in the encounter between participants. The subtle blueprint of this first stage involves a client bringing into awareness with increasing intensity a major conflict in the "here and now" of a counseling session. Initial interventions guide the client's attention to his or her immediate experience -- the "what and how" of behavior -- and away from speculations as to causes -- the "whys" for such action. During this process, clients are encouraged to assume increasing responsibility (ability to respond) for individual thoughts, feelings, and sensations; and to experience the intimate, basic connection between verbal and nonverbal behaviors.

The Gestalt therapist operates in a more dynamic and active manner than that of a client-centered counselor who relies primarily upon receptive qualities expressed through empathic reflection of feelings. In Gestalt work, one approaches the first phase of a session by exploring what a client is currently experiencing in

awareness. As feelings and sensations are reported, links to body awareness are emphasized and one may be asked to give the selected physical areas a "voice." If a client has difficulty bringing into awareness and expressing such material, attention can be directed to obvious body correlates of verbal expression such as breathing pattern, hand gestures, voice tone, posture. To facilitate greater clarity of experience of a particular body area, one can suggest that a client repeat, exaggerate, or spontaneously develop a particular physical action in nonverbal form or express with increasing loudness and meaning key words and sentences. A Gestalt counselor pays special attention to the subtle discrepancy between verbal and nonverbal action as this often indicates a block in awareness which can mask a significant tension area. Clients can be guided to experience greater degrees of personal responsibility by the simple means of restating and repeating particular phrases in communication, e.g., substituting "want" for "should," "won't" for "can't," "I" for "it," and presenting all material in the present tense.

Avoid interpreting and evaluating a client's behavior as this can block immediate experience and provoke defensiveness, thus hampering the flow of a session. Intuitive insights into a client's behavior patterns can be effectively utilized by suggesting experiments in awareness focusing in which a client can experience possible factors that are believed to tie into the current problem. If experiments are presented with much hesitancy and fear of failure, they are often weakly complied with or rejected. Therefore, one is encouraged to present such tasks with a firm and helpful attitude; one which allows no shame or blame for the apparent unproductiveness of a particular exercise. Projections of mistrust directed at an observing group or counselor may be worked with by asking the client to give them a voice, then to reply, and to maintain this dialogue until negative feelings are reowned and tension released. Deal with any projections toward you as a counselor within a framework of external dialogue (see Stage 2). Take the opportunity to work through personal defensive reactions in a session where you can function as a client. The end phase of Stage 1 is marked by a client's ability to readily focus awareness when directed and express feelings and sensations in the immediate present. At this point, a specific emotional problem is often present in awareness along with a corresponding physical area of tension. In addition to awareness probing ("What are you aware of now?") which aims to establish a link between body and feeling states, fantasy work, nonverbal explorations and direct questions can be utilized to bring an unfinished issue into focus. Guided fantasy work often allows clients to symbolically present unresolved problems with minimal resistance, while nonverbal activities encourage overly intellectual or verbally blocked individuals to more spontaneously express themselves. The direct questions, "What do you want to work on today?" or "What do you want to avoid working on today?" can at times elicit important material to explore.

Clients display varying resistance to Gestalt work. Overall resistance serves to inhibit natural growth processes and functions to manipulate the external environment. Appropriate to the skill and experience of the counselor, the frustration of such resistance patterns throughout the first stage is a necessary intervention for continued movement. The labeling of the game the client is "playing" (e.g., helpless, stupid, confused, seductive) a dramatic withdrawal of the therapist's interest, or the suggestion of a seemingly extraneous nonverbal action for client to engage in, e.g., singing or jumping, are possible tactical responses. Strategically, such encounters require advanced counseling skills practiced with a Zen-like attitude: courage, compassion, and a nonattachment to the outcome.

Stage 2: Working with External Polarities

The client is now asked to take the growing tension that is experienced and explore it within the framework of an external dialogue. Whether the conflict is presented as an intra- or interpersonal one, it is most often necessary to initiate the dialogue as a conversation between two people, the client and a significant other. Underlying internal polarities (Stage 3) are typically obscure and require the experience of emotional intensity resulting from an external conversation to bring them into fuller awareness. Work with internal polarities at this phase tends toward superficiality and an emphasis on a purely intellectual approach to conflict resolution.

With an interpersonal problem, there is little difficulty in employing two chairs and having the client change places as a conversation unfolds. If a client is eager to work within an area of perceived personal deficiency (too submissive, lonely, angry) direct that the dialogue involve another person with whom such feelings are currently experienced, or historically have been experienced, or even hypothetically can be experienced. When appropriate, suggest that clients engage in a dialogue with a parent or sibling who was critical in early emotional conditioning. Continue to be alert to the verbal/nonverbal discrepancy and utilize

techniques discussed earlier. At times it will be helpful to have a client try a particular line (on for size) or intensify nonverbal activity (e.g., hitting a pillow, standing up) to accompany the dialogue. The major thrust of the work at this point is to bring hidden feelings into awareness by dramatizing the outer manifestation of an inner conflict. In the closing phase of Stage 2, clients can become quite immersed in the process of self discovery and need little overt guidance to shuttle between chairs, appropriately express feelings, monitor and modify behavior patterns. While each dialogue will have its own rhythm and momentum, it is useful to have the client sequentially express: (a) what are the direct issues and feelings present in the relationship with the significant other; (b) what are the covert feelings and hidden agendas perceived in the relationship; and, (c) what are the desired solutions to the stated issues and conflicts. Be alert to a sudden withdrawal of involvement, confusion, and reluctance to continue. This behavior can signify the "impasse" in Gestalt work, reflecting the emergence of the "implosive layer" of personality which requires more active intervention from the counselor.

Stage 3: Working with Internal Polarities

All external difficulties, in a Gestalt framework, can be re-perceived and potentially resolved as internalized tensions. Inner imbalances, cognitive, emotional, physical, are based on conditioning in our personal history and tend to be maintained by reinforcement of established behavior patterns. It is clear that such imbalances focus and shape our perceptions and emotional reactions to external reality, and less obvious but profoundly critical in our experience is the fact that these very imbalances draw into our lives a further compounding of external problems. In Gestalt work, one validates the principle that factors in consciousness determine behavior. A major growth step for a client is to recognize that the conflict being explored in the external dialogue can simultaneously be understood and more effectively resolved as a reflection of a deep internal tension. The accomplishment of this critical shift in self understanding requires a sufficient amount of objective awareness on the part of the client. Thus, if a counselor directs a client who is totally identified in the external problem to shift to Stage 3, frustration and confusion will result. In such sessions, it is best to aim for integration (Stage 4) of the conflict within the form of a more external solution. Those clients who do respond to a refocusing of the dialogue in terms of internal polarities often require precision of labeling and clarification of meaning from the therapist regarding the polarities they are exploring. While a re-clarification of meaning and refinement in labeling by both client and counselor is necessary in order to reduce confusion, it is more productive to explore one major polarity per session.

The central focus of activity at this stage is a growing confrontation between two significant and opposing aspects within the client's personality. The more fully each aspect or pole of tension is dramatized and experienced, the more likely it can be resolved. Thus, counselor behavior is geared to aid clients in giving each aspect its full voice, appropriate gestures, and nonverbal stance. During a session, one can observe an inner conflict, initially latent, emerge with increasing power as the thoughts, feelings, sensations and bodily responses associated with an historical trauma come into awareness. The basic ambivalence, the polar nature of tension, strikes us as we observe each aspect surface in its identity. As each polarity expands its "territory" in awareness, the tension may painfully stretch until, from the client's point of view, it is unresolvable, unbearable, a desperate void. This phenomenon, while not present in all sessions, is indicative of the "implosive layer" of personality and is a necessary precondition for the formation of a new Gestalt.

Stage 4: Integration

When successful, this stage celebrates the triumph of unifying over separative factors within the client's personality, signals the emergence of a new Gestalt, and reflects that within the struggle between the yin and the yang is the Tao. The core element here is a resolution of the internal conflict resulting from a major reorganization and re-perception of the problem. The more powerfully the conflict rises into awareness, the greater the potential for release. In its more dramatic form, the release is a spontaneous, uncontrolled physiological outpouring -- tears, laughter, and rage -- a manifesting of the "explosive layer" of personality. Explosive expression of integration, like an initial satori, can have a lasting effect as blocks to inner sources of energy are released. However, the intensity of a reaction does not necessarily reflect the growth producing value of an integration, many of which can take a more gentle outer form with profound inner consequences for development.

Integration is a continual, evolutionary, life-sustaining experience -- there is no "final" Gestalt. In the process of integration, factors that were opposing each other in consciousness mutually move to accept each

other's actual identity that was hidden behind a conditioned mask of pain, rage, or weakness. With this accomplished, these elements begin to relate more harmoniously and the whole personality experiences a fresh flow of life energy, an increased capacity for enjoyment, and a more expanded awareness into areas of existing and still unresolved tensions.

As you are empathically unified with your client, you will sense when an integration of the polarities has taken place. Explosive integrations are quite clear and, in addition to external observation of change, one often finds sympathetic responses in one's own body corresponding to the client's breakthrough. Less intense breakthroughs can also be perceived externally in the form of relaxation of muscles, smiles, laughter, quiet sighs, and sobs. It is important to be alert to the less intense expressions of integration, so that you can acknowledge that the session is completed and make no further demands on the client to produce a more intense reaction. Most sessions fall short of full spontaneous integrations (which probably reflects clients' resistances to change, and level of the skill of the counselor). Much can be accomplished by working with clients to harmonize a conflict through the use of guided integration techniques. Four types of approaches, which can be applied singularly or in combination will be indicated. One can encourage clients to express verbally what each opposing aspect can truly appreciate and respect in the other. Some clients will respond more effectively to the opportunity to express these attitudes in a nonverbal manner, through gesture or movement. A guided fantasy of mutual acceptance can be presented by the therapist which incorporates the positive qualities of each aspect; perhaps taking the form of each polarity moving toward each other, and embracing. Some clients who are responsive to meditation methods may choose to work with a meditation technique which allows them to harmonize and integrate the polar tension.

To facilitate a client's cognitive reorganization you may at times present your perceptions of the changes you observed from the beginning to the end of a session. In order to close the psychological distance between client, counselor and group, some limited sharing of reactions are often helpful after the client leaves the hot seat. Keep in mind, however, that the sharing phase is still part of the therapeutic session and prolonged interactions among participants can seriously scatter a client's awareness and hamper the subtle integrations taking place.

EXERCISES AND EXPERIMENTS

Many therapeutic interventions called exercises and experiments have been developed to enhance awareness and bring about client change. Exercises are defined as ready-made techniques that are sometimes used to evoke certain emotions (such as the expression of anger) in clients. Experiments, on the other hand, grow out of the immediate interaction (dialogue) between client and therapist. They are spontaneous, one-of-a-kind, and relevant to a particular moment and the particular development of an emerging issue such as the client's reports of a need, dream, fantasy, and body awareness. Experiments are done with full participation and collaboration with clients and are designed to expand clients' awareness and to help them to try out new ways of behaving rather than to achieve a particular result. These experiments may take many forms. According to Gerald Corey, some are:

"Imagining a threatening future event; setting up a dialogue between a client and some significant person in his and her life;

Dramatizing the memory of a painful event; reliving a particularly profound early experience in the present; assuming the identity of one's mother or father through role-playing;

Focusing on gestures, posture, and other nonverbal signs of inner expression; carrying on a dialogue between two conflicting aspects within the person."

While participating in experiments, clients actually experience the feelings associated with their conflicts or issues in the here and now. Experiments are tailored to each individual client and used in a timely manner; they are to be carried out in a context that offers safety and support while encouraging the client to risk trying out new behavior. The Gestalt therapy focus is on the entire person and all parts—verbal and nonverbal behaviors, emotional feelings— all are attended to.

Gestalt therapists are said to rely on spontaneity, inventiveness, and "present-centeredness" and a range of possible therapeutic encounters, interactions that leads to exercises and experiments that are potentially infinite but can be categorized as follows.

THE USE OF STATEMENTS AND QUESTIONS TO FOCUS AWARENESS.

Many interventions have to do with simply asking "what the client is aware of experiencing;" or asking simple and direct questions as, "What are you feeling?" "What are you thinking?" The client may be instructed to start a sentence with "Now, I am aware..." or is asked to repeat a behavior, as in, "Please wring your hands together again." A frequent technique is to follow the client's awareness report with the instruction, "Stay with it!" or "Feel it out!"

CLIENT'S VERBAL BEHAVIOR OR LANGUAGE.

Awareness can be enhanced and emphasized through the client's verbal behavior or language since client speech patterns are considered to be an expression of their feelings, thoughts, and attitudes. Some aspects of language that might indicate the clients' avoidance of strong emotions or of self-responsibility are the general pronouns such as "**it**" and "**you.**" Clients are instructed to substitute, when appropriate, the personal pronoun "**I**" for these pronouns to assume a sense of responsibility for his or her feelings or thoughts (ownership). Sometimes clients may be asked to change their questions into direct statements in order to assume responsibility for what they say. Other examples of helping clients to be more in control using language are to have them omit qualifiers and disclaimers such as "**maybe,**" "**perhaps,**" or "**I guess**" from their language patterns. This changes ambivalent and weak statements into more clear and direct statements; to substitute "**I won't**" for "**I can't**" because often "**can't**" gives the feeling of being unable to do something. It may be more accurate to say "**I won't**" meaning "I choose not to do this for any of various reasons," or use the word, "**want**" instead of "**need**" which is considered an indication of urgency and anxiety, and is less accurate. Other changes might be to change "**should**" and "**ought**" to "**I choose to**" or "**I want to**" increasing the clients' power and control of their lives.

NONVERBAL BEHAVIOR.

Awareness can also be enhanced by focusing on nonverbal behavior and may include any technique that makes the clients more aware of their body functioning or helps them to be aware of how they can use their bodies to support excitement, awareness, and contact. The parts of the body that therapists may attend to include the mouth, jaw, voice, eyes, nose, neck, shoulders, arms, hands, torso, legs, feet, and the entire body. The therapist, for example, may point out to and explore with the client how he or she is smiling while at the same time expressing anger.

SELF-DIALOGUE.

Self-dialogue by clients is an **intervention** used by Gestalt therapists that allow clients to get in touch with feelings that they may not be unaware of and, therefore, increase the integration of different parts of clients that do not match or conflicts in clients. Examples of some common conflicts include "the parent inside versus the child inside, the responsible one versus the impulsive one, the puritanical side versus the sexual side, the 'good side' versus the 'bad side,' the aggressive self versus the passive self, the autonomous side versus the resentful side, and the hard worker versus the goof-off." The client is assisted in accepting and learning to live with his or her polarities and not necessarily getting rid of any one part or trait.

The client is engaged in the self-dialogue by using what is called the empty-chair technique. Using two chairs, the client is asked to take one role (for example, the parent inside) in one chair and then play the other role (for example, the child inside) in the second chair. As the client changes roles and the dialogue continues between both sides of the client he or she moves back and forth between the two chairs. Again according to Corey, other examples of situations in which dialogues can be used include "one part of the body versus the other (one hand versus the other), between a client and another person, or between the self and object such as a building or an accomplishment."

ENACTMENT AND DRAMATIZATION.

Enactment increases awareness through the dramatizing of some part of the client's existence by asking him or her to put his or her feelings or thoughts into action such as instructing the client to "Say it to the person (when in group therapy)," or to role-play using the empty chair technique. "Put words to it" is also often said to the client. Exaggeration is a form of enactment in which clients are instructed to exaggerate a feeling, thought or a movement in order to provide more intensity of feelings. Enactment can be therapeutic and give rise to creativity.

GUIDED FANTASY.

Guided fantasy (visualization) is a technique some clients are able to use more effectively than using enactment to bring an experience into the here and now. Clients are asked to close their eyes (if comfortable) and, with the guidance of the therapist, slowly imagine a scene of the past or future event. More and more details are used to describe the event with all senses and thoughts.

DREAM WORK.

Work is most important in Gestalt therapy. The aim is to "bring dreams back to life and relive them as though they are happening now." Working with the clients' dreams requires developing a list of all the details of the dream, remembering each person, event, and mood in it and then becoming each of these parts through role-playing, and inventing dialogue. Each part of the dream is thought to represent the clients' own contradictory and inconsistent sides. Dialogue between these opposing sides leads clients toward gradual insight into the range of their feelings and important themes in their lives.

AWARENESS OF SELF AND OTHERS.

An example of how this technique is used by the Gestalt therapist is having the client to "become" another person such as asking "the client to be his mother and say what his mother would say if the client came in at 2:00 A.M." This provides more insight for the client rather just asking what the client thinks his mother would say if he came home at 2:00 A.M.

AVOIDANCE BEHAVIORS.

Awareness of and the reintegration the client's avoidance behaviors are assisted by the interventions used to increase and enhance awareness of feelings, thought, and behaviors.

HOMEWORK.

Homework assignments between therapy sessions may include asking clients to write dialogues between parts of themselves or between parts of their bodies, gather information, or do other tasks that are related to and fit with what is going on in the therapy process. Homework may become more difficult as the awareness develops.

Therapy sessions are generally scheduled once a week and individual therapy is often combined with **group therapy**, marital or **family therapy**, movement therapy, **meditation**, or biofeedback training. Sessions can be scheduled from five times a week to every other week and session frequency depends on how long the client can go between sessions without loss of continuity or relapsing. Meetings less frequent than once a week are thought to diminish the intensity of the therapy unless the client attends weekly group with the same therapist. More than twice a week is not usually indicated except with clients who have psychotic disorders, and is contraindicated with those who have a **borderline personality disorder**.

Weekly group therapy may vary from one and one-half to three hours in length, with the average length of two hours. A typical group is composed of ten members and usually balanced between males and females. Any age is thought to be appropriate for Gestalt therapy. There are groups for children as well.

Gestalt therapy is considered by its proponents to have a greater range of styles and modalities than other therapeutic systems and is practiced in individual therapy, groups, workshops, couples, families, and with children, and in agencies such as clinics, family service agencies, hospitals, private practice, growth centers. According to Corey, "The therapeutic style of therapists in each modality vary drastically on many dimensions including degree and type of structure; quantity and quality of techniques used; frequency of sessions, abrasiveness and ease of relating, focus on body, cognitions, feelings; interpersonal contact; knowledge of work within psychodynamic themes; and degree of personal encountering."

THE RULES:-

The "rules" of Gestalt therapy (Levitsky & Perls, 1970) include the following:

1. Communication is in the present tense (looking backward or *forward* is discouraged).
2. Communication is between equals (one talks with, not at). One uses "I" language rather than "it" language (to encourage the acceptance of responsibility).

3. The client continually focuses on immediate experience (for example, the therapist will ask, "How does it feel to describe the hostility?" "Tell me *what* you are feeling at this moment").
4. There is no gossip (talking about someone else).
5. Questions are discouraged (because questions are often quiet *ways* of stating opinions rather than seeking information).

MORAL PERSPECTS:-

The "moral precepts" (or rules for patients to live by) of Gestalt therapy are described by Naranjo (1970Jj).

1. **Live now** (Be concerned not with the past or the future but with the present.)
2. **Live here.** (Be concerned with what is present, not with what is absent.)
3. **Stop imagining.** (Experience only the real.)
4. **Stop unnecessary thinking.** (Be oriented toward hearing, seeing, smelling, tasting, and touching.)
5. **Express directly.** (Do not explain, judge, or manipulate.)
6. Be aware of both the pleasant and the unpleasant
7. Reject-all "shoulds" and "ought" that are not your own.
8. Take complete responsibility for your actions, thoughts, and feelings.
9. Surrender to being what you really are.

RISKS

Gestalt therapy is considered to have pioneered the development of many useful and creative innovations in psychotherapy theory and practice. However, there is some concern regarding abusing power by therapist, as well as the high-intensity interaction involved. The concern is in the nature of therapists being enchanted with and using the techniques of Gestalt therapy with other theories of therapy without having the appropriate training in Gestalt therapy theory. Gestalt therapists are very active and directive within the therapy session and therefore, care must be taken that they have characteristics that include sensitivity, timing, inventiveness, empathy, and respect for the client. These characteristics, along with ethical practice, are dependent on the skill, training, experience, and judgment of the therapist. The intensity of the therapy might not be suitable for all patients, and even disruptive for some, despite the competence of the therapist. In addition, there is a lack of monitored, scientific research evidence supporting the effectiveness of Gestalt therapy.

CONCLUSION:

Gestalt therapists expect that as result of their involvement in the Gestalt process clients will improve in the following ways: have increased awareness of themselves; assume ownership of their experience rather than making others responsible for what they are thinking, feeling, or doing; develop skills and acquire values that will allow them to satisfy their needs without violating the rights of others; become aware of all their senses (smelling, tasting, touching, hearing, and seeing); accept responsibility for their actions and the resulting consequences; move toward internal self-support from expectations for external support; to be able to ask for and get help from others and be able to give to others.

ORIGINS AND TRADITIONAL TECHNIQUES OF BEHAVIOR THERAPY

Traditionally, the behavioral approach allies itself with

- (1) A scientific emphasis and
- (2) A deemphasis of the role of inferred variables.

The behaviorists are likely to trace their origins to the "science" of Skinner or Pavlov rather than the "mentalism" of Freud. The focus is on stimuli and responses rather than variables that are presumed to mediate them. However, behavior therapy over the years has broadened its scope to include techniques that address cognitive and other mediation processes (Goldfried & Davison, 1994). Nevertheless, it is instructive to review behavior therapy's historical roots.

A BRIEF HISTORY:

Beginning by presenting the groundbreaking work of Watson and Rayner (1920), who conducted the widely cited laboratory study of Albert and the laboratory rat. This study was in effect, a demonstration of how a "neurosis" can develop in a child. In the tradition of Pavlovian conditioning, Albert was given a laboratory rat to play with. But each time the rat was introduced, loud noise was introduced simultaneously. After a few such trials, the rat (previously a neutral stimulus) elicited a fearful response that also generalized to similar furry objects.

Mary Cover Jones (1924) demonstrated how *such* learned fears can be removed. A 3-year-old boy, Peter, was afraid of rabbits, rats, and other such objects. To eradicate the fear, Jones brought a caged rabbit closer and closer as the boy was eating. The feared object thus became associated with food, and after a few months Peter's fear of the rabbit disappeared entirely. It is important, however, to recall Jones's admonition that the fear of the rabbit must not be so intense that the child will develop an aversion to food. Watson's conditioning of fears and Jones's "reconditioning" of them were erect antecedents of the development of Wolpe's (1958) therapy by reciprocal inhibition, which arrived on the scene some 30 years later.

As the foregoing experiences of Albert and Peter suggest, the major theoretical underpinnings of the behavior therapy movement were Pavlovian conditioning and Hullian learning theory. In the 1950s, Joseph Wolpe and Arnold Lazarus in South Africa and Hans Eysenck at Maudsley Hospital in London began to apply the results of animal research to the acquisition and elimination of anxiety in humans. Wolpe began to experiment with the reduction of fears in humans by having patients, while in a state of heightened relaxation, imagine the situations in which their fears occurred. Wolpe's technique of systematic desensitization, like Jones's reconditioning work, provided a practical demonstration of how principles of learning could be applied in the clinical setting. In his work on conditioned reflex therapy, Salter (1949) also attempted to develop a method of therapy that was derived from the Pavlovian tradition.

It is important to note that these investigators did not merely introduce new techniques. They also argued vigorously that their techniques were derived from the framework of a systematic experimental science. In addition, they took pains to point out that their demonstrations of the origins and treatment of neurotic fears proved that it was unnecessary to subscribe to the "mentalist demonology" of Freudianism or to the "psychiatric pigeonholing" practiced by Kraepelinians.

At about the same time that Wolpe, Lazarus, and Eysenck were developing their conditioning procedures, the operant tradition was beginning to have an impact. Skinner and his colleagues (Lindsley & Skinner, 1954; Skinner, 1953) were demonstrating that the behavior of hospitalized psychotic patients could be modified by operant procedures. By establishing controlled environments to ensure that certain responses of the patient would be followed by specific consequences, significant behavioral changes were produced.

At first, there was a radical quality to behavior therapy. The inner world of the patient was largely ignored in the rush to focus on behavior. Whether in reaction to the mentalism of psychoanalysis or out of an overly

provincial view of what should be the subject matter of science, the early behavior therapists studiously avoided anything of a cognitive nature.

However, in 1954, Julian Rotter published his book *Social Learning and Clinical Psychology*. In it he demonstrated convincingly that a motivation reinforcement approach to psychology could be coupled with a cognitive-expectancy approach. Thus, behavior was regarded as being determined both by the value of reinforcements and by the expectancy that such reinforcements would occur following the behavior in question. What is more, Rotter's novel views were supported by a series of laboratory studies that left no doubt that one could be clinical, oriented toward both learning theory and cognitive theory, and scientifically respectable, all at the same time.

Also significant in this context was the application of Albert Bandura's (1969) social learning contributions to the modification of a behavior. It was theorists such as Rotter and Bandura who led the way to the current cognitive emphasis, giving behavior therapy a wider ranging and serviceable character.

It is important to point out that the "mentalism" of psychoanalysis or other psychodynamic approaches is not the same as the "cognitive processes" concepts that are used today. Freud's references to thinking processes were never defined operationally. They were vague notions incapable of objective measurement, poorly anchored either to antecedent conditions or consequent outcomes. More often than not, Freud viewed thinking processes as irrational, distorting processes rather than problem-solving processes.

For Freud, mentalism seemed to function largely in the service of the reified ego, id, and superego----little people who ran about the mind distorting, projecting, condemning, or figuring out ways of fooling one another. In contrast, current notions of cognition emphasize such concepts as expectancies, cognitive schemas, or memory processes. These are concepts that can be measured and quantified. They can be objectively defined in ways that lead to reliable understanding among separate- investigators.

TRADITIONAL TECHNIQUES OF BEHAVIORAL THERAPY:

Behavior therapists use a variety of specific techniques-not only for different patients but for the same patient at different points in the overall treatment process. Lazarus (1971a) refers to this *as a broad spectrum behavior therapy*. Each technique can serve a specific purpose but that, in reality, they are complementary.

For example, a woman who has trouble coping with a domineering husband may undergo assertiveness training to learn specific behaviors. But when she uses these behaviors, other sets of fears about their relationship may begin to worry her. Therefore, she may also require therapeutic sessions that will help her restructure her beliefs about the marriage that are illogical and tend to perpetuate her submissive behavior. She might also participate in modeling or observational learning to help her cope.

A comprehensive behavioral assessment is conducted before behavioral treatments or techniques are selected and implemented. For example, a functional analysis of the presenting problem helps to identify

- (1) The stimulus or antecedent conditions that bring *on* the problematic behavior;
- (2) The Organismic variables (such as cognitive biases) that are related to the problematic behavior;
- (3) The exact description of the problem; and
- (4) The consequences of the problematic behavior.

By completing such a detailed analysis, behavior and cognitive-behavioral therapists can prescribe appropriate treatments.

Now we will go through some behavioral techniques.

SYSTEMATIC DESENSITIZATION:

This technique is typically applied when a patient has the capacity to respond adequately to a particular situation (or class of situations), yet reacts with anxiety, fear, or avoidance. Basically, systematic desensitization is a technique to reduce anxiety. Developed by Salter (1949) and Wolpe (1958), it is based on *reciprocal inhibition* the apparently simple principle that one cannot be relaxed and anxious simultaneously. The idea is to teach Patients to relax and then, while they are in a relaxed state, to introduce a gradually increasing series of anxiety-producing stimuli. Eventually, the patient becomes desensitized to the feared stimuli by virtue of having experienced them in a relaxed state. Systematic desensitization has been shown to be efficacious for animal phobias, public speaking anxiety, and social anxiety (Chambless et al., 1998).

TECHNIQUES AND PROCEDURES:

Systematic desensitization begins with the collection of a history of the patient's problem. This includes information both about specific precipitating conditions and about developmental factors. Collecting a history may require several interviews, and it often includes the administration of questionnaires. The principal reason for all of this is to pinpoint the locus of the patient's anxiety. It is also part of assessment to determine whether systematic desensitization is the proper treatment. In a patient with adequate coping potential who nevertheless reacts to certain situations with severe anxiety, desensitization is often appropriate.

On the other hand, if a patient lacks certain skills and then becomes anxious in situations that require those skills, desensitization could be inappropriate and counterproductive. For example, if a man becomes seriously anxious in social situations that involve dancing, it would seem more efficient to see that he learns to dance rather than desensitize him to what is, in fact, a behavioral deficit.

Next, the problem is explained to the patient. This explanation is normally elaborated to include examples from the patient's life and to cover the manner in which the patient acquired and maintains the anxieties. Following this, the rationale for systematic desensitization is also explained. The explanations and the illustrations should be in language that the patient can understand-free from scientific jargon. In a sense, the clinician uses this phase to "sell" the patient on the efficacy of systematic desensitization. It should be added that the entire process of interviewing, assessment, and explanation is conducted with warmth, acceptance, and understanding.

The next two phases involve *training in relaxation* and the establishment of an *anxiety hierarchy*. While work is begun on the anxiety hierarchy, training in relaxation is also started.

Relaxation:

Behavior therapists frequently use the progressive relaxation methods of Jacobson (1938). The patient is first taught to tense and relax particular muscle groups and then to distinguish between sensations of relaxation and tensing. The instructions for relaxation can easily be taped and played at home for practice. Generally, about six sessions are devoted to relaxation training. In some instances, hypnosis may be used to induce relaxation. In other instances, the patient may be asked to imagine relaxing scene still other instances, breathing exercises are used to enhance relaxation.

The Anxiety Hierarchy:

In discussions about specific problems, the situations in which they occur, and their development, the patient and the therapist work together to construct a hierarchy. The recurrent themes in the patient's difficulties and anxieties are isolated and then ordered in terms of their power to induce anxiety (from situations that provoke very low levels of anxiety through situations that precipitate extreme anxiety reactions). A typical anxiety hierarchy consists of 20 to 25 items in approximately equal intervals from low through

moderate to extreme. The following anxiety hierarchy was that of a 24-year old female student who experienced severe examination anxiety (Wolpe, 1973):

1. Four days before an examination.
2. Three days before an examination.
3. Two days before an examination.
4. One day before an examination.
5. The night before an examination.
6. The examination paper lies face down before her.
7. Awaiting the distribution of examination papers.
8. before the unopened doors of the examination room.
9. In the process of answering an examination paper.
10. on the way to the university on the day of the examination.

This hierarchy illustrates two points: First, it is organized largely along spatial-temporal lines. Second, the items are not exactly organized in a logical fashion.

One might expect item 10 (the most anxiety-provoking item) to be placed near the middle of the hierarchy. This suggests how idiosyncratic *hierarchies* can be—after all, it is the patient's anxiety, not the clinician's!

In the desensitization procedure, the patient is asked to imagine the weakest item in the hierarchy (the item that provokes the least anxiety) while being completely relaxed. The therapist describes the scene, and the patient imagines (for about 10 seconds) being in the scene. Therapist moves the patient up the hierarchy gradually (between two and five items per session). However, if at any time the level of anxiety begins to increase, the patient is instructed to signal, where upon the therapist requests that the patient stop visualizing that scene. The therapist then helps the patient to relax once more. After a few minutes, the procedure can be started again. Ideally, over a period of several sessions, the patient will be able to imagine the highest item in the hierarchy without discomfort.

Rationale:

Although Wolpe's explanation for the success of systematic desensitization is based on the principle of *counter conditioning* (the substitution of relaxation for anxiety), others are not so sure (Davison & Wilson, 1973). Some have argued that the operative process is really *extinction*. That is, when the patient repeatedly visualizes anxiety-generating situations but without ensuing bad experiences, the anxiety responses are eventually extinguished (Wilson & Davison, 1971). Alternatively, Mathews (1971) argues on behalf of a *habituation* hypothesis. Emmelkamp (1982) has reviewed the empirical support for these and other theoretical explanations.

The standard method of desensitization is to present scenes in a graduated ascending fashion in order to avoid premature arousal of anxiety that would disrupt the procedure. However, some clinician have found that presenting *the* hierarchy in the reverse order (most anxiety-provoking items first) is also effective in reducing various phobias. Richardson and Suinn (1973) also report positive results when participants are exposed only to the three highest hierarchy scenes.

Systematic desensitization involves a number of components. The instructions suggest that a positive outcome is likely. Consequently, the Patient's expectations for improvement may affect the process. Another crucial element may be positive reinforcement from the therapist follow, in, the patient's reports of lessened anxiety, improvement outside the consulting room, or the successful completion of anxiety hierarchies.

For example, Leitenberg, Agras, Barlow, and Oliveau (1969) observed that, with snake phobias, the effects of systematic desensitization are best when the therapist uses reinforcing comments, such as "Good," "Excellent," and "You're doing fine," when participants (1) visualize a scene without reporting anxiety, (2) complete a hierarchy item, and (3) report progress in approaching a snake during practice. Goldfried (1971)

argues that systematic desensitization is far from a passive process that is applied to patients to reduce their fears. Rather, it represents the acquisition of a skill that the patients can use to reduce their own fear.

In that sense, Goldfried regards systematic desensitization as training in self control. From a cognitive viewpoint, Valins and Ray (1967) explain the effectiveness of systematic desensitization in terms of patients' belief that they are relaxed. Others, such as Sullivan and Denney (1977), emphasize the importance of getting the patient to expect improvement.

All of the foregoing suggests that systematic desensitization is hardly the simple mechanical or conditioning process that it was once thought to be. A number of relationship variables seem implicated, as well as beliefs or expectations—on the part of the patient. In general, systematic desensitization has proven to be a moderately effective form of psychological intervention for a variety of clinical conditions. As might be expected, research suggests that it is most effective when used to treat anxiety disorders particularly specific phobias. Social anxiety, public speaking anxiety, and generalized anxiety disorder.

Exposure Therapy:

The term *exposure therapy* is used to describe a behavior therapy technique that is a refinement of a set of procedures originally known as flooding or implosion. The roots of exposure therapy can be traced to Masserman (1943), who studied anxiety reactions and avoidance behaviors in cats. Masserman's studies involved inducing "neurotic behaviors" in cats by administering shock under certain environmental conditions. He subsequently discovered that the avoidance behavior could be extinguished if the cats were forced to remain in the situation in which they had previously been shocked (that is, no escape or avoidance was possible). These findings were the basis for developing anxiety treatments for humans. There is empirical support for the efficacy of exposure treatments for specific phobias, panic disorder, agoraphobia, social phobia, post traumatic stress disorder, and obsessive-compulsive disorder.

In exposure therapy, patients expose themselves to those stimuli or situations that were previously feared and avoided. The "exposure" can be in real life (in *vivo*) or in fantasy (in-imagino). In the latter version, patients are asked to imagine themselves in the presence of the feared stimulus (such as a spider) or in the anxiety-provoking situation (such as speaking in front of an audience). Several researchers suggest that certain features must be present in exposure treatments in order for the patient to achieve maximum benefit (Barlow & Cerny, 1988):

1. Exposure should be of long rather than short duration.
2. Exposure should be repeated until all fear/anxiety is eliminated.
3. Exposure should be graduated, starting with low-anxiety stimuli/situations and progressing to high-anxiety stimuli/situations.
4. Patients must attend to the feared stimulus and interact with it as much as possible.
5. Exposure must provoke anxiety.

Like the other behavioral therapies exposure treatment can be used as a self-contained treatment or as one component of a multimodal treatment.

What is especially ingenious about their version of exposure treatment is that they have patients expose themselves to *interoceptive cues*---internal physiological stimuli such as rapid breathing and dizziness. This modification was necessary because individuals suffering from panic disorder typically report that their panic attacks are unpredictable and "come out of the blue." In such cases, no external anxiety provoking stimulus or situation is apparent. In contrast, individuals with other, non-panic anxiety disorders report acute anxiety primarily in the face of certain external stimuli or situations.

Researchers recently compared the effectiveness of two forms of treatment for panic disorder with agoraphobia: one that included interoceptive exposure and one that incorporated breathing retraining instead of interoceptive exposure. Although both forms of treatment were effective, results indicated that panic disorder patients who received the interoceptive exposure component reported less impairment and fewer panic attacks at post treatment and at follow-up. Thus, the addition of the interoceptive exposure component had beneficial effects.

Behavior Rehearsal:

Included under this broad heading are a variety of techniques whose aim is to enlarge the patient's repertoire of coping behaviors. Clearly, *behavior rehearsal* is not a new concept, it has been around in one form or another for many years. For example, Moreno (1947) developed psychodrama, a form of role playing, to help solve patients' problems, and Kelly (1955) used fixed-role therapy.

However, it is important to note that such forms of role playing or behavior rehearsal have purposes that depart from behavioral goals. For Moreno, role playing provided a therapeutic release of emotions that was also diagnostic in identifying the causes of the patient's problems. For Kelly, role playing was a method of altering the patient's cognitive structure. Again, we are reminded that specific therapeutic techniques are not the exclusive province of one theoretical frame of reference. Different theorists may use similar techniques for vastly different reasons.

The Technique:

According to Goldfried and Davison (1994), the use of behavior rehearsal involves four stages.

The first stage is to prepare the patient by explaining the necessity for acquiring new behaviors, getting the patient to accept for rehearsal as a useful device, and reducing any initial anxiety over the prospect of role playing.

The second stage involves the selection of target situations. At this point many therapists draw up a hierarchy of role playing or rehearsal situations. This hierarchy should relate directly to those situations in which the patient has been having difficulty. A sample hierarchy of target situations (ranked in order of the increasingly complex behavioral skills required) might be as follows:

1. You ask a secretary for information about a class.
2. You ask a student in class about last week's assignment.
3. After class, you approach the instructor with a question about the lecture.
4. You go to the instructor's office and engage her in conversation about a certain point.
5. You purposely engage another student, who you know disagrees with you, in a minor debate about some issue.

The third stage is the actual behavior rehearsal. Moving up the hierarchy, the patient plays the appropriate roles, with the therapist providing both coaching and feedback regarding the adequacy of the patient's performance. Sometimes videotaped replays are used as, an aid. In other instances the "therapist (or a therapeutic aide) exchanges roles with the patient in order to provide an appropriate model. When patients develop proficiency in one target situation, they move up the hierarchy.

The final stage is the patient's actual utilization of newly acquired skills in real-life situations. After such in vivo experiences, the patient and the therapist discuss the patient's performance and feelings about the experiences. Sometimes patients are asked to keep the records describing the situations they were in, their behavior, and its consequences.

Assertiveness Training:

One application of behavioral rehearsal is *assertiveness training*. *Wolpe* regarded assertive responses as an example of how reciprocal inhibition works. That is, it is impossible to behave assertively and to be passive simultaneously. Situations that once evoked anxiety will no longer do so because the assertive behavior inhibits the anxiety.

Originally, assertiveness training was designed as a treatment for persons whose anxiety seemed to stem from their timid mode of coping with situations (Wolpe, 1958; Wolpe & Lazarus, 1966). A variety of assertiveness training programs have been developed specifically for individuals seeking to overcome destructive passivity. But assertiveness training has also been used in treating sexual problems, depression, and marital conflicts. It is important to note that cognitive self-statements (for example, "I was thinking that I am perfectly free to say no") may enhance the effects of assertiveness training. In fact many procedures can be used to increase assertiveness. Behavior rehearsal is perhaps the most obvious one.

Lack of assertiveness may stem from a variety of sources. In some cases, the cause may be a simple lack of information, in which case the treatment might center largely on information giving. In other instances, a kind of anticipatory anxiety may prevent persons from behaving assertively. In such cases, the treatment may involve desensitization. Yet other individuals may have unrealistic (negative) expectations about what will ensue if they become assertive. Some clinicians would deal with such expectations through interpretation or rational-emotive techniques.

Similar techniques might be applied to patients who feel that assertiveness is wrong. Finally, there are patients whose lack of assertiveness involves a behavioral deficit they do not know how to behave assertively, for such patients, behavior rehearsal, modeling, and related procedures would be used.

Assertiveness training is not the same as trying to teach people to be aggressive. It is really a method of training people to express how they feel without trampling on the rights of [other in](#) the process (Wolpe & Lazarus, 1966). Take the spectator at a basketball game that cannot see because the person in front constantly jumps up. To react by saying "If you don't sit down, I'm going to knock you down" is aggressive. But saying "Please, I wish you would sit down; I just can't see anything" is an assertive response. Indeed, assertiveness training has been useful in teaching overly aggressive persons gentler and more effective ways of meeting their needs.

Contingency Management:

A variety of Skinnerian or operant techniques are all referred to as *contingency management* procedures. They share the common goal of controlling behavior by manipulating its consequences.

Techniques:

Contingency management can take many forms, of which the following are just a few examples.

1. **Shaping:** A desired-behavior is developed by first rewarding any behavior that approximates it. Gradually, through selective reinforcement of behavior more and more closely resembling the desired behavior, the final behavior is shaped. This technique is sometimes called *successive approximation*.
2. **Time Out:** Undesirable behavior is extinguished by removing the person temporarily from a situation in which that behavior is reinforced. A child who disrupts the class is removed so that the disruptive behavior cannot be reinforced by the attention of others.
3. **Contingency Contracting:** A formal agreement or contract is struck between therapist and patient, specifying the consequences of certain behaviors on the part of both.

4. “Grandma’s Rule”:

The basic idea is akin to Grandma's exhortation, "First you work, then you play!" It means that desired activity is reinforced by allowing the individual the privilege of engaging in a more attractive behavior. For example, the child is allowed to play ball after the music lesson is completed. This method is sometimes referred to as the *Premack principle* (Premack, 1959).

Token Economies:

The operant approach is most commonly used in environments in which a therapist or other institutional staff can exert significant control over the reinforcement contingencies relative to patient behavior. The principles of operant conditioning are especially apparent in *token economy* programs that are designed to modify the behavior of institutionalized populations; such as those with mental retardation-or chronic mental illness (Kazdin, 1977; Liberman, 1972). Such programs can make an institution a more livable place that ultimately is more conducive to therapeutic gains. Many of the social skills that are "shaped" will also facilitate a smoother transition to a non institutional setting.

In establishing a token economy, there are three major considerations (Krasner, 1971).

First, there must be a clear and careful specification of the desirable behaviors that will be reinforced.

Second, a clearly defined reinforcer for medium of exchange-for example, colored poker *chips*, cards, or coins) must be decided upon.

Third, backup reinforcers are established. These may be special privileges or other things desired by the patient. Thus, two tokens, each worth 10 points, might be exchanged for permission to watch TV n extra hour, or one token worth 5 points might be exchanged for a small piece of candy. It goes without saying that a token economy also requires a fairly elaborate system of record keeping and a staff that is very observant and committed to the importance of the program.

Token economies are used to promote desired behavior through the control of reinforcements. Whether the desired behavior is increased neatness, greater social participation, or improved job performance, the probability of its occurrence can be enhanced by the award of tokens of varying value. But why use tokens at all? Why not reinforce proper bed making directly? The reason is essentially that the effect of reinforcement is greater if the reinforcement occurs immediately after the behavior occurs. If the reward of attending a movie occurs ten hours after a patient sweeps out his or her room, it is not likely to be nearly so effective as a token given immediately. That token will come to signify reward and will assume much of the effectiveness of the backup reward for which it may be exchanged.

COGNITIVE BEHAVIORAL THERAPY

BACKGROUND:

Behavior therapy was largely dominated by terms and concepts such as *behavior modification*, *systematic desensitization*, *operant*, *shaping*, *token economies*, and *aversive conditioning*. But this is no longer true. We now find coverage of concepts and terms such as *cognitive-behavior modification*, *cognitive restructuring*, *stress inoculation*, and *rational restructuring*. The change signifies a cognitive orientation in behavior therapy that has overtaken the field in recent years (Hollon & Beck, 1994).

A cognitive perspective on clinical problems emphasizes the role of thinking in the etiology and maintenance of problems. *Cognitive-behavioral therapy* seeks to modify or change patterns of thinking that are believed to contribute to a patient's problems. These techniques have a great deal of empirical support (Smith et al., 1980; Hollon & Beck, 1994) and are seen as among the most effective of all psychological interventions. For example, cognitive-behavioral treatments dominate the most recent list of examples of empirically supported treatments (Chambless et al., 1998).

Although several effective treatments based on traditional behavioral learning principles had been developed, by the early 1970s it was clear that a number of frequently encountered clinical conditions (such as depression) were not so easily addressed by treatments based on classical or operant conditioning (Thorpe & Olson, 1997). In a sense, the present blending of behavioral and cognitive methods was stimulated by the limitations of both psychodynamics and radical behaviorism. This blending was also facilitated by the presence of several theoretical models that incorporated cognitive variables along with the scientific and experimental rigor so precious to behaviorists.

THE ROLE OF ROTTER'S SOCIAL LEARNING THEORY:

In particular, Rotter's social learning theory (Rotter, 1954; Rotter, Chance, & Phares, 1972) helped bridge the chasm between traditional psychodynamic clinical practice and learning theory. It was a theory that explained behavior as a joint product of both reinforcement and expectancies. People choose to behave in the way they do because the behavior chosen is expected to lead to a goal or outcome of some value.

The presence of such a social learning theory did at least two things for the development of behavior therapy.

First, it produced a number of clinicians (and influenced others) who were ready to accept newer behavioral techniques and were equipped with a theoretical point of view that could facilitate the modification of those techniques along more cognitive lines.

Second, the theory, being both cognitive and motivational, was capable of blending the older psychodynamically derived therapeutic procedures with the newer behavioral and cognitive approaches. By its very presence, then, social learning theory facilitated a fusion of approaches that is still in progress. In evaluating the relevance of this social learning theory for the practice of both traditional psychotherapy and behavior therapy, consider the following implications discussed by Rotter (1970):

1. Psychotherapy is regarded as a learning situation, and the role of the therapist is to enable the patient to achieve planned changes in observable behavior and thinking.
2. A problem-solving framework is a useful way in which to view most patients' difficulties.
3. Most often, the role of the therapist is to guide the teaming process so that not only are inadequate behaviors and attitudes weakened but more satisfying and constructive behaviors are learned.
4. It is often necessary to change unrealistic expectancies; in so doing, one must realize how it was that certain behaviors and expectancies arose and how prior experience was misapplied or over generalized by the patient.
5. In therapy, the patient must learn to be concerned with the feelings, expectations, motives, and needs of others.
6. New experiences or different ones in real life can often be much more effective than those that occur only during the therapy situation.
7. In general, therapy is a kind of social interaction.

Now we will discuss a number of different cognitive-behavioral treatment approaches.

MODELING:

Albert Bandura (1969, 1971) has advocated the use of *modeling*, or observational learning, as a means of altering behavior patterns, particularly in children. Imitation, Modeling or observation are much more efficient techniques for learning than is a simple reliance on punishment for incorrect responses and reward for correct ones. A new skill or a new set of behaviors can be learned more efficiently by observing another person. Seeing others perform a behavior can also help eliminate or reduce associated fears and anxieties. Finally, through observation one can learn to use behaviors that are already part of the behavioral repertoire. Perhaps the most widespread use of modeling has been to eliminate unrealistic fears (Bandura, Adams, & Bever, 1977; Bandura, Jeffrey, & Wright, 1974). Phobias (especially snake phobias) have been the principal means both of demonstrating and of investigating modeling techniques. In participant modeling, for example, the patient observes the therapist or model holding a snake, allowing the snake to crawl over the body, and so on. Next, in guided participation, the patient is exhorted to try out a series of similar activities, graded according to their potential for producing anxiety.

As noted by Thorpe and Olson (1997), observational learning is best and most efficient when the following four conditions are met:

1. Patients attend to the model. Incentives may be helpful to facilitate attention.
2. Patients retain the information provided by the model. It may be helpful to use imagery techniques or verbal coding strategies to help patients organize and retain the information provided.
3. Patients must perform the modeled behavior. It is important that the behavior be mimicked and practiced to facilitate learning and behavior change.
4. Finally, patients must be motivated to use the behavior that is modeled. It is suggested that reinforcing consequences be used to increase the likelihood that the modeled behavior will be used.

RATIONAL RESTRUCTURING:

Drawing on the work of Albert Ellis (1962), Goldfried and Davison (1994) accept the notion that much maladaptive behavior is determined by the ways in which people construe their world or by the assumptions they make about it. If this is true, it follows that the behavior therapist must help patients learn to label situations more realistically so that they can ultimately attain greater satisfactions. To facilitate this *rational restructuring* of events, the therapist may sometimes use argument or discussion in an attempt to get patients to see the irrationality of their beliefs. In addition to providing patients with a rational analysis of their problems, the therapist may attempt to teach them to "modify their internal sentences." That is, patients may be taught that when they begin to feel upset in real situations, they should pause and ask themselves what they are telling themselves about those situations. In other instances, the therapist may have patients in the therapy room imagine particular problem situations. All of this may be combined with behavior rehearsal, in vivo assignments, modeling, and so on. Thus, rational restructuring is not a self-contained, theoretically derived procedure, but an eclectic series of techniques that can be tailored to suit the particular demands of the patient's situation.

A good example of rational restructuring is Ellis's (1962) *rational-emotive Behavior therapy (REBT)*. Ellis was clearly a pioneer in what has become cognitive behavior therapy. REBT aims to change behavior by altering the way the patient thinks about things. Conventional wisdom often suggests that events cause (lead directly to) emotional and behavioral problems. According to Ellis, however, all behavior, whether maladjusted or otherwise, is determined not by events but by the person's interpretation of those events. In the ABCs of REBT, Ellis argues that it is *beliefs (B)* about *activating events* or situations (A) that determine the problematic emotional or behavioral *consequences (C)*. He sees psychoanalytic therapy, with its extreme reliance on insight, as inefficient; the origins of irrational thinking are not nearly so important as the messages that people give to themselves.

In a sense, the basic goal of REBT is to make people confront their own illogical thinking. Ellis tries to get the client to use common sense. The therapist becomes an active and directive teacher. Reviews of the empirical literature suggest that REBT is an effective psychological intervention.

STRESS INOCULATION TRAINING:

Based on his own research, which indicated that patients could use self-talk or self-instruction to modify their behavior and that therapists could, in effect, train patients to change their self-talk, Meichenbaum (1977) developed **stress inoculation training (SIT)**.

SIT aims to prevent problems from developing by "inoculating" individuals to ongoing and future stressors (Meichenbaum, 1996). It is designed to help individuals develop new coping skills and make full use of the coping strategies that are already in place (Meichenbaum, 1996). SIT for coping with stressors appears on the most recent list of examples of empirically supported treatments (Chambless et al., 1998). SIT proceeds in three overlapping phases (Meichenbaum, 1996):

1. Conceptualization phase: First, the client is educated with regard to how certain thinking or appraisal patterns lead to stress, other negative emotions, and dysfunctional behavior. The client is taught how to identify potential threats or stressors and how to cope with them.

2. Skill acquisition and rehearsal phase: The client practices coping skills (for example, emotional self-regulation, cognitive restructuring, using support systems) in the clinic and then gradually out in the "real world" as he or she is confronted with the stressors.

3. Application phase: Additional opportunities arise for the client to apply a wide variety of coping skills across a range of stressful conditions. In order to consolidate these skills, the client may be asked to help others who are experiencing similar problems. Further "inoculation" procedures, including relapse prevention and booster sessions, are incorporated during the follow-up period.

BECK'S COGNITIVE THERAPY:

Aaron Beck has been a pioneer in the development of cognitive-behavioral treatments for a variety of clinical problems (Beck, 1991). This model of intervention entails the use of both cognitive and behavioral techniques to modify dysfunctional thinking patterns that characterize the problem or disorder in question (Beck, 1993). For example, depressed individuals are believed to harbor negative/pessimistic beliefs about themselves, their world, and their future. Thus, a depressed 45-year-old man might be prone to be highly self-critical (and often feel guilty, even when it is not appropriate), to view the world as generally unsupportive and unfair, and not to hold much hope that things will improve in the future. The following **cognitive therapy (CT)** techniques might be used in the treatment of his depression (Beck, Rush, Shaw, & Emery, 1979):

1. Scheduling activities to counteract his relative inactivity and tendency to focus on his depressive feelings.
2. Increasing the rates of pleasurable activities as well as of those in which some degree of mastery is experienced.
3. **Cognitive rehearsal:** Have the patient imagine each successive step leading to the completion of an important task (such as attending an exercise class), so that potential impediments can be identified, anticipated, and addressed.
4. Assertiveness training and role playing.
5. Identifying automatic thoughts that occur before or during dysphoric episodes (for example, "I can't do anything right").
6. Examining the reality or accuracy of these thoughts by challenging their validity ("So you don't think there is *anything* you can do right?").

7. Teaching the patient to reattribute the "blame" for negative consequences to the appropriate source. Depressed patients have a tendency to blame themselves for negative outcomes, even when they are not to blame.

8. Helping the patient search for alternative solutions to his problems instead of resigning himself to their insolubility.

AN EVALUATION OF THE BEHAVIORAL AND COGNITIVE BEHAVIORAL THERAPY:

Proponents of behavior therapy see their progress as tangible evidence of what can be accomplished when the mentalistic, subjective, and nonscientific "mumbo jumbo" of psychodynamics or phenomenology is cast aside. Critics, on the other hand, see behavior therapy as superficial, pretentiously scientific, and even dehumanizing in its mechanistic attempts to change human behavior. Indeed, these criticisms reflect many of the "myths" about behavior therapy (Goldfried & Davison, 1994). In any case, more clinical psychologists describe their orientation as cognitive or behavioral than any other orientation (Norcross et al., 1997a).

We will now examine some of the strengths and limitations of the behavioral and cognitive behavioral approaches, and then close with a summary of some of the challenges ahead.

Strengths:

In many ways, behavior therapy has changed the fields of psychotherapy and clinical psychology (Wilson, 1997). Below, we discuss several major ways that behavior therapy has had an impact.

Effectiveness:

There is ample evidence that a wide variety of behavioral and cognitive-behavioral therapies are effective (Chambless et al., 1998; Emmelkamp, 1994; Hollon & Beck, 1994; Smith et al., 1980). In fact, behavior therapy appears to be the treatment of choice for many disorders (Wilson, 1997). The separate effect sizes calculated for RET, non-RET cognitive therapies, systematic desensitization, behavior modification, and cognitive-behavioral therapy indicated that, on average, a client who received any of these forms of behavior therapy was functioning better than at least 75% of those who did not receive any treatment. More recent meta-analyses have reached similar conclusions across a range of disorders. Further, the majority of meta-analytic studies that have compared the effectiveness of behavioral or cognitive-behavioral techniques with that of other forms of psychotherapy (such as psychodynamic or client centered) have found a small but consistent superiority for behavioral and cognitive-behavioral methods. Clearly, these are important treatment techniques for a clinician to master.

Efficiency:

The behavior therapy movement also brought with it a series of techniques that were shorter and more efficient. The interminable number of 50-minute psychotherapy hours was replaced by a much shorter series of consultations that focused on the patient's specific complaints. A series of equally specific procedures was applied, and the entire process terminated when the patient's complaints no longer existed. Gone was the everlasting "rooting out" of underlying pathology, the exhaustive sorting out of the patient's history, and the lengthy quest for insight. In their place came an emphasis on the present and a pragmatism that was signaled by the use of specific techniques for specific problems. Because of its efficiency, behavior therapy may be especially well suited for the managed care environment (Wilson, 1997).

In fact, some behavioral techniques can be implemented by Technicians who are trained to work under the supervision of a doctoral-level clinician. Thus, not every component of behavior therapy needs to be executed by Ph.D. personnel. Behavior therapy programs (for example, token economies) should be set up by trained professionals, but their day-to-day execution can be put in the hands of technicians, paraprofessionals, nurses, and others. This constitutes a considerable savings in mental health personnel and enables a larger patient population to be reached than can be treated by the in-depth, one-on-one procedures of an exclusively psychodynamic approach.

It is also worth repeating that behavior therapy is the undisputed leader in "manualizing" its treatments so that empirically supported techniques can be administered in a standardized fashion. Not only does this facilitate conducting research and providing effective treatment, but it also facilitates the training of future clinical psychologists to administer these effective treatments.

BREADTH OF APPLICATION:

A contribution of major proportions has been the extension of the range of applicability of therapy. Traditional psychotherapy had been reserved for the middle and upper classes who had the time and money to devote to their psychological woes and for articulate, relatively sophisticated college students with well-developed repertoires of coping behaviors who were attending colleges or universities that made counseling services available to them at little if any cost. Behavior therapy has changed all that.

Now, even financially strapped individuals with mental retardation or a chronic mental illness can be helped by therapy. Such persons may not rise to the level of independent functioning, but with the advent of operant procedures and token economies, their institutional adjustment can often be significantly improved. Not only the institutionalized have benefited from behavioral techniques. Patients at lower socioeconomic levels with limited sophistication and verbal skills can also experience anxieties and phobias or lack necessary problem-solving skills. In cases where lengthy verbal psychotherapies that were highly dependent on insight, symbolism, or the release of some inner potential were likely to fail, a broad band of behavior therapies seems to offer real hope.

CRITICISM:

1. Dehumanizing:

Among the more durable characterizations of the behavioral-movement are "Sterile," "mechanistic," and "dehumanizing." To demonstrate that there is real labeling bias operating here, Woolfolk, Woolfolk, and Wilson (1977) asked two groups of undergraduates to view identical videotapes of a teacher using reinforcement methods. The first group was told that the tape illustrated behavior modification; for the second group, the tape was labeled as an illustration of humanistic education. A subsequent questionnaire revealed that when the tape was described in humanistic terms, the teacher on the tape received significantly better ratings and the teaching method depicted was seen as significantly more likely to promote learning and emotional growth.

The use of mechanistic-sounding terms such as *response*, *stimulus*, *reinforcement*, and *operant* need not imply that either the therapist or the method is detached, sterile, or dehumanizing. The systematic use of learning principles and the examination of animal analogues for simple illustrations to highlight the nature of human learning should not lead to a facile inference that behavior therapists are cold, manipulating robots whose interests lie more in their learning principles than in their clients. It is to be hoped that with the increasing cognitive orientation such erroneous images will begin to fade.

Although nothing inherent in behavior therapy should lead one to conclude that it is necessarily dehumanizing, its early history provided a few unfortunate episodes and a considerable stridency of rhetoric. We have already commented on the use of aversion techniques that to many seemed more akin to sadism than therapy. In addition, many early behaviorists seemed to be so obsessed with their principles and their technology that common sense seemed to be the chief casualty. Their sometimes naive attacks on psychodynamics and their zealous overconfidence in technology often played right into the hands of their critics and only served to make life more difficult for their successors. In the final analysis, no technology or set of principles is going to permit clinicians the luxury of giving up their clinical sensitivity.

2. Lack Of Inner Growth:

Behavior therapy has also been criticized as ameliorative but not productive of any inner growth. It has been said to relieve symptoms or provide a few skills while failing to offer fulfilling creative experiences. Although it may, alter behavior, it falls short of promoting understanding. It eaves out the inner person, values, responsibility, and motives. Again, though not completely off the mark, such criticisms are less appropriate for the newer cognitive emphasis in behavior therapy, an emphasis that does deal with mediating variables such as expectancies and self-concepts--as long as these are objectively describable and are inferred from specific stimuli and responses.

3. Little Focus On Mental Processes:

Although few behavior therapists can be said to embrace the unconscious, only the radical behaviorists still insist on the absolute rejection of all so-called mental processes. Likewise, not many behavioral clinicians are likely to recommend an exhaustive reconstruction of the patient's past (especially the psychosexuality of childhood). But this is not to argue that past learning experiences have not led to the patient's current predicament. Indeed they have. Any sensitive behavioral clinician will devote time to understanding what those learning experiences were all about. By so doing, the clinician can better distinguish between behavioral deficits and problems and can better understand how to structure present learning experiences so as to enable patients to better cope with their problems.

4. Manipulation And Control:

One of the most volatile, emotion-laden criticisms of behavior therapy centers on the issue of manipulation and control. The argument seems to be that behavior therapies represent insidious and often direct assaults on the patient's capacity to make decisions, assume responsibility, and maintain dignity and integrity. But patients typically seek professional assistance voluntarily, thereby acknowledging their need for help and guidance in altering their lives. Thus, the patient does have the opportunity to accept or reject the procedures offered (though this defense may not apply as well in institutional settings). Further, many behavior therapy techniques are aimed at helping patients establish skills that will lead to greater self-direction and self-control (Goldfried & Davison, 1994).

5. Generalization:

A particularly damaging criticism of several forms of behavior therapy concerns their effectiveness in settings other than those in which they are conducted. In other words, do the effects of behavior therapy programs generalize beyond the situations in which they are practiced? Again, in the interests of even handedness, it should be pointed out that most forms of psychotherapy is subject to the same question. For example, some patients show a marked improvement or adjustment in the psychotherapy situation even though this adjustment fails to generalize to non-therapy settings.

GROUP THERAPY: METHODS AND PROCEDURES

Group therapy is a form of **psychotherapy** in which a small, carefully selected group of individuals meets regularly with a therapist.

The purpose of group therapy is to assist each individual in emotional growth and personal problem solving. People may choose group therapy for several reasons. First, group therapy is usually less expensive than individual therapy, because group members share the cost. Group therapy also allows a therapist to provide treatment to more people than would be possible otherwise. Aside from cost and efficiency advantages, group therapy allows people to hear and see how others deal with their problems. In addition, group members receive vital support and encouragement from others in the group. They can try out new ways of behaving in a safe, supportive environment and learn how others perceive them.

Groups also have disadvantages. Individuals spend less time talking about their own problems than they would in one-on-one therapy. Also, certain group members may interact with other group members in hurtful ways, such as by yelling at them or criticizing them harshly. Generally, therapists try to intercede when group members act in destructive ways. Another disadvantage of group therapy involves confidentiality. Although group members usually promise to treat all therapy discussions as confidential, some group members may worry that other members will share their secrets outside of the group. Group members who believe this may be less willing to disclose all of their problems, lessening the effectiveness of therapy for them.

CURATIVE FACTORS:

The noted **psychiatrist** Dr. Irvin D. Yalom in his book *The Theory and Practice of Group Therapy* identified 11 "curative factors" that are the "primary agents of change" in group therapy.

1. **Instillation Of Hope:** All patients come into therapy hoping to decrease their suffering and improve their lives. Because each member in a therapy group is inevitably at a different point on the coping continuum and grows at a different rate, watching others cope with and overcome similar problems successfully instills hope and inspiration.
2. **Universality:** A common feeling among group therapy members, especially when a group is just starting, is that of being isolated, unique, and apart from others. Many who enter group therapy have great difficulty sustaining interpersonal relationships, and feel unlikable and unlovable. Group therapy provides a powerful antidote to these feelings. For many, it may be the first time they feel understood and similar to others. Enormous relief often accompanies the recognition that they are not alone; this is a special benefit of group therapy.
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4. **Information Giving:** An essential component of many therapy groups is increasing members' knowledge and understanding of a common problem. Explicit instruction about
- 5.
6. the nature of their shared illness, such as bipolar disorders, depression, panic disorders, or bulimia, is often a key part of the therapy. Most patients leave the group far more knowledgeable about their specific condition than when they entered. This makes them increasingly able to help others with the same or similar problems.
7. **Altruism:** Group therapy offers its members a unique opportunity: the chance to help others. Often patients with psychiatric problems believe they have very little to offer others because they have needed so much help themselves; this can make them feel inadequate. The process of helping others is a powerful therapeutic tool that greatly enhances members' self-esteem and feeling of self-worth.

8. **Corrective Recapitulation Of The Primary Family:** Many people who enter group therapy had troubled family lives during their formative years. The group becomes a substitute family that resembles—and improves upon—the family of origin in significant ways. Like a family, a therapy group consists of a leader (or co leaders), an authority figure that evokes feelings similar to those felt toward parents. Other group members substitute for siblings, vying for attention and affection from the leader/parent, and forming subgroups and coalitions with other members. This recasting of the family of origin gives members a chance to correct dysfunctional interpersonal relationships in a way that can have a powerful therapeutic impact.
9. **Improved Social Learning Skills:** According to Yalom, social learning, or the development of basic social skills, is a therapeutic factor that occurs in all therapy groups. Some groups place considerable emphasis on improving social skills, for example, with adolescents preparing to leave a psychiatric hospital, or among bereaved or divorced members seeking to date again. Group members offer feedback to one another about the appropriateness of the others' behavior. While this may be painful, the directness and honesty with which it is offered can provide much-needed behavioral correction and thus improve relationships both within and outside the group.
10. **Imitative Behavior:** Research shows that therapists exert a powerful influence on the communication patterns of group members by modeling certain behaviors. For example, therapists model active listening, giving nonjudgmental feedback, and offering support. Over time, members pick up these behaviors and incorporate them. This earns them increasingly positive feedback from others, enhancing their self-esteem and emotional growth.
11. **Interpersonal Learning:** Human beings are social animals, born ready to connect. Our lives are characterized by intense and persistent relationships, and much of our self-esteem is developed via feedback and reflection from important others. Yet we all develop distortions in the way we see others, and these distortions can damage even our most important relationships. Therapy groups provide an opportunity for members to improve their ability to relate to others and live far more satisfying lives because of it.
12. **Group Cohesiveness:** Belonging, acceptance, and approval are among the most important and universal of human needs. Fitting in with our peers as children and adolescents, pledging a sorority or fraternity as young adults, and joining a church or other social group as adults all fulfill these basic human needs. Many people with emotional problems, however, have not experienced success as group members. For them, group therapy may make them feel truly accepted and valued for the first time. This can be a powerful healing factor as individuals replace their feelings of isolation and separateness with a sense of belonging.
13. **Catharsis:** Catharsis is a powerful emotional experience—the release of conscious or unconscious feelings—followed by a feeling of great relief. Catharsis is a factor in most therapies, including group therapy. It is a type of emotional learning, as opposed to intellectual understanding, that can lead to immediate and long-lasting change. While catharsis cannot be forced, a group environment provides ample opportunity for members to have these powerful experiences.
14. **Existential Factors:** Existential factors are certain realities of life including death, isolation, freedom, and meaninglessness. Becoming aware of these realities can lead to anxiety. The trust and openness that develops among members of a therapy group, however, permits exploration of these fundamental issues, and can help members develop an acceptance of difficult realities.

HISTORY OF GROUP THERAPY:

For many years, group therapy was practiced as a method of choice by only a handful of dedicated therapists. Others used it primarily because their caseload was so heavy that group therapy was the only means by which they could deal with the overload. Still other therapists used group therapy as a supplementary technique. During individual therapy, for example, a therapist might work toward getting a patient to achieve insight into his pathological need to derogate women; then, during a group session, other members of the group might reinforce the therapist's interpretation through their reactions to the patient. Instead of being seen as a second choice or supplementary form of treatment, however, group methods have now achieved considerably more visibility and respectability.

One of the earliest formal uses of group methods was Joseph H. Pratt's work with tubercular patients in 1905. This was an inspirational approach that used lectures and group discussion to help lift the spirits of depressed patients and promote their cooperation with the medical regimen. A major figure in the group movement was J. L. Moreno, who began to develop some group methods in Vienna in the early 1900s and, in 1925, introduced his psychodrama to the United States. Moreno also used the term **group therapy**

In the 1930s, Slavson encouraged adolescent patients to work through their problems with controlled play. His procedures were based on psychoanalytic concepts. These and other figures have been identified as pioneers of the group movement (American Group Psychotherapy Association, 1971; Lubin, 1976).

As was true for clinical psychology generally, it was the aftermath of World War II that really brought group methods to center stage. The large number of war veterans sharply increased the demand for counseling and therapy. The limitations of the existing agency and hospital facilities made it necessary to use group methods to cope with the immediate demand. Once these methods had gained a foothold in the terrain of pragmatism, respectability was but a short distance away. As a result, nearly every school or approach to individual psychotherapy now has its group counterpart. There are group therapies based on psychoanalytic principles, Gestalt therapy principles, behavior therapy principles, and many other types as well.

APPROACHES TO GROUP THERAPY:

PSYCHODYNAMIC THERAPIES:

Psychodynamic theory was conceived by Sigmund Freud, the father of **psychoanalysis**. Freud believed that unconscious psychological forces determine thoughts, feelings, and behaviors. By analyzing the interactions among group members, psychodynamic therapies focus on helping individuals become aware of their unconscious needs and motivations as well as the concerns common to all group members. Issues of authority (the relationship to the therapist) and affection (the relationships among group members) provide rich sources of material that the therapist can use to help group members understand their relationships and themselves.

PHENOMENOLOGICAL APPROACH:

Until the 1940s virtually all psychotherapy was based on psychoanalytic principles. Several group therapy approaches were developed by psychoanalytically trained therapists looking to expand their focus beyond the unconscious to the interpretations individuals place on their experiences. Underlying this focus is the belief that human beings are capable of consciously controlling their behavior and taking responsibility for their decisions. Some phenomenological therapies include:

- **Psychodrama**—developed by Jacob Moreno, an Austrian psychiatrist, this technique encourages members to play the parts of significant individuals in their lives to help them solve interpersonal conflicts. Psychodrama brings the conflict into the present, emphasizing dramatic action as a way of helping group members solve their problems. Catharsis, the therapeutic release of emotions followed by relief, plays a prominent role. This approach is particularly useful for people who find it difficult to express their feelings in words.
- **Person-centered therapy**—a therapeutic approach developed by the **psychologist** Carl Rogers. Rather than viewing the therapist as expert, Rogers believed that the client's own drive toward growth and development is the most important healing factor. The therapist empathizes with the client's feelings and perceptions, helping him or her gain insight and plan constructive action. Rogers's **person-centered therapy** became the basis for the intensive group experience known as the encounter group, in which the leader helps members discuss their feelings about one another and, through the group process, grow as individuals. Rogers emphasized honest feedback and the awareness, expression, and acceptance of feelings. He believed that a trusting and cohesive atmosphere is fundamental to the therapeutic effect of the group.

- **Gestalt Group therapy**—in the 1940s Fritz Perls challenged psychoanalytic theory and practice with this approach. Members take turns being in the "hot seat," an empty chair used to represent people with whom the person is experiencing conflicts. The therapist encourages the client to become aware of feelings and impulses previously denied.
- **Transactional Analysis:**

Eric Berne (1961) was the developer of and the dynamic force behind *transactional analysis (TA)*. TA is essentially a process in which the interactions among the various aspects of the people in the group are analyzed. Analyses often focus on three chief "ego states" within each person: the Child ego state, the Parent ego state, and the adult ego state. Each state is composed of positive and negative features. The positive Child is spontaneous, uninhibited, and creative. The negative Child is fearful, overly emotional, or full of guilt. On the positive side, the Parent state may be characterized as supportive, loving, or understanding. The negative Parent is punishing and quick to condemn. The Adult ego state is less oriented toward feelings and emotions and is more involved with logic, planning, or information gathering. But the Adult can be reasonable (positive) or non-spontaneous (negative).

Depending on how a person was raised, he or she will manifest various aspects of these positive and negative characteristics. A child who was over supervised or overregulated by the parents might develop an inhibited or guilt-ridden ego state. As a result, if a person in the TA group setting discusses sex in a pompous, authoritative way, and the inhibited person is then asked to respond, she or he may be unable to do so or may respond under great tension. The therapist might then point out how each person is playing negative roles (Child, Adult, or Parent). One person is playing a negative Parent role by being pompous and authoritative. The other person is responding in a negative Child fashion by being inhibited and tense. Repeated analyses of the interactions among group members reveal the ego states that they typically employ. These analyses lead the patients toward more rational, appropriate ways of thinking that are closer to the Adult ego state (positive).

The units that are analyzed are *transactions* the stimuli and responses that are active between ego states in two or more people at any given moment. A transactional analysis involves the determination of which ego states are operative in a given transaction between people.

Another aspect of TA is the emphasis on games (Berne, 1964). Games are behaviors that people frequently use to avoid getting too close to other people. TA tends to be a swift-moving, action-oriented approach. There is an emphasis on the present, a sense of grappling with immediate problems that makes it attractive to many patients and therapists. TA has an aura of responsibility, of learning how to choose between options and this can be a desirable alternative to more traditional forms of group therapy that often appear to lumber along at an agonizingly slow pace. There is also a conceptual simplicity to the whole scheme that seems to make it understandable and perhaps more acceptable to patient and professional alike.

Yet this very simplicity, coupled with the zeal and entrepreneurship of some TA practitioners, has led to a popularization that can be dangerous. Critics argue that human problems are complex events that cannot easily be translated into games and that any gains from such procedures are therefore likely to be short-lived. Certainly there is little in the research literature to calm such fears, since TA therapists rarely produce research.

- **BEHAVIOR THERAPIES:**—Behavior therapies comprise a number of techniques based upon a common theoretical belief: maladaptive behaviors develop according to the same principles that govern all learning. As a result, they can be unlearned, and new, more adaptive behaviors learned in their place. The emergence of behavior therapies in the 1950s represented a radical departure from psychoanalysis.

Behavior therapies focus on how a problem behavior originated, and on the environmental factors that maintain it. Individuals are encouraged to become self-analytical, looking at events occurring before, during, and after the problem behavior takes place. Strategies are then developed and employed to replace the problem behavior with new, more adaptive behaviors.

An important offshoot of behavior therapy is **cognitive-behavioral therapy**, developed in the 1960s and 1970s, which is the predominant behavioral approach used today. It emphasizes the examination of thoughts with the goal of changing them to more rational and less inflammatory ones. Albert Ellis, a psychologist who believed that we cause our own unhappiness by our interpretations of events, rather than

by the events themselves, is a major figure in cognitive-behavior therapy. By changing what we tell ourselves, Ellis believes we can reduce the strength of our emotional reactions, as well.

- **TIME LIMITED GROUP THERAPY:-** The final example of a group approach that we will discuss is *time-limited group therapy* (Budman & Gurman, 1988). This contemporary model is appealing because of its efficiency, and it is likely to guide group interventions in the age of managed care. These groups typically meet on a weekly basis for a predetermined number of sessions (for example, eight sessions for a group consisting of members who are dealing with a life crisis). As described by Budman and Gurman (1988), time limited groups are characterized by four central features:
 1. **Pregroup preparation and screening.** A 1-hour pregroup workshop is used to evaluate and screen potential group members.
 2. **Establishing and maintaining a working focus** in the group. The working focus is defined as a particular concern, problem, or issue that is shared by all group members (for example, problems with intimacy).
 3. **Group cohesion.** Theorists and researchers are convinced that group cohesion (the degree to which group members are involved in the process, trust each other, cooperate, focus, and express compassion) is an important determinant of outcome.
 4. **Reactions to time limits.** Because these groups are time limited, group members may experience feelings related to life stage, to prior losses, and to frustration that more has not been accomplished in the group.

Budman and Gurman (1988) also analyze the different stages of the group (starting the group, early group development, termination, follow-up), because each stage presents the therapist with different challenges.

METHODS AND PROCEDURES OF GROUP THERAPY:

Who Belongs In A Therapy Group?

Individuals that share a common problem or concern are often placed in therapy groups where they can share their mutual struggles and feelings. Groups for bulimic individuals, victims of sexual **abuse**, adult children of alcoholics, and recovering drug addicts are some types of common therapy groups.

Individuals that are suicidal, homicidal, psychotic, or in the midst of a major life crisis are not typically placed in group therapy until their behavior and emotional states have stabilized. People with organic **brain** injury and other cognitive impairments may also be poor candidates for group therapy, as are patients with sociopath traits, who show little ability to empathize with others.

How Are Therapy Groups Constructed?

Therapy groups may be homogeneous or heterogeneous. Homogeneous groups, described above, have members with similar diagnostic backgrounds (for example, they may all suffer from depression). Heterogeneous groups contain a mix of individuals with different emotional problems. The number of group members typically ranges from five to 12.

How Do Therapy Group Works?

The number of sessions in group therapy depends upon the group's makeup, goals, and setting. Some are time limited, with a predetermined number of sessions known to all members at the beginning. Others are indeterminate, and the group and/or therapist determine when the group is ready to disband. Membership may be closed or open to new members. The therapeutic approach used depends on both the focus of the group and the therapist's orientation.

In group therapy sessions, members are encouraged to discuss the issues that brought them into therapy openly and honestly. The therapist works to create an atmosphere of trust and acceptance that encourages

members to support one another. Ground rules may be set at the beginning, such as maintaining confidentiality of group discussions, and restricting social contact among members outside the group.

The therapist facilitates the group process, that is, the effective functioning of the group, and guides individuals in self-discovery. Depending upon the group's goals and the therapist's orientation, sessions may be either highly structured or fluid and relatively undirected. Typically, the leader steers a middle course, providing direction when the group gets off track, yet letting members set their own agenda. The therapist may guide the group by reinforcing the positive behaviors they engage in. For example, if one member shows empathy and supportive listening to another, the therapist might compliment that member and explain the value of that behavior to the group. In almost all group therapy situations, the therapist will emphasize the commonalities among members to instill a sense of group identity.

Self-help or **support groups** like Alcoholics Anonymous and Weight Watchers fall outside of the psychotherapy realm. These groups offer many of the same benefits, including social support, the opportunity to identify with others, and the sense of belonging that makes group therapy effective for many. **Self-help groups** also meet to share their common concern and help one another cope. These groups, however, are typically leaderless or run by a member who takes on the leader role for one or more meetings. Sometimes self-help groups can be an adjunct to psychotherapy groups.

How Are Patients Referred For Therapy Group?

Individuals are typically referred for group therapy by a psychologist or psychiatrist. Some may participate in both individual and group therapy. Before a person begins in a therapy group, the leader interviews the individual to ensure a good fit between their needs and the group's. The individual may be given some preliminary information before sessions begin, such as guidelines and ground rules, and information about the problem on which the group is focused.

When Do Therapy Groups End?

Therapy groups end in a variety of ways. Some, such as those in drug rehabilitation programs and psychiatric hospitals, may be ongoing, with patients coming and going as they leave the facility. Others may have an end date set from the outset. Still others may continue until the group and/or the therapist believe the group goals have been met.

The termination of a long-term therapy group may cause feelings of **grief**, loss, abandonment, anger, or rejection in some members. The therapist attempts to deal with these feelings and foster a sense of closure by encouraging exploration of feelings and use of newly acquired coping techniques for handling them. Working through this termination phase is an important part of the treatment process.

Who Drops Out Of Therapy Groups?

Individuals who are emotionally fragile or unable to tolerate aggressive or hostile comments from other members are at risk of dropping out, as are those who have trouble communicating in a group setting. If the therapist does not support them and help reduce their sense of isolation and aloneness, they may drop out and feel like failures. The group can be injured by the premature departure of any of its members, and it is up to the therapist to minimize the likelihood of this occurrence by careful selection and management of the group process.

Results:-

Studies have shown that both group and individual psychotherapy benefit about 85% of the patients who participate in them. Ideally, patients leave with a better understanding and acceptance of themselves, and stronger interpersonal and coping skills. Some individuals continue in therapy after the group disbands, either individually or in another group setting.

THE FUTURE OF GROUP THERAPY:-

Despite the economy and efficiency of group treatments, they appear to be underutilized. One major reason is that clients and therapists alike tend to view group therapy as a second-choice form of treatment. Fewer clients are referred for group therapy as compared with other forms of treatment, and even those who are referred may not follow through and join a group.

Managed behavioral health care is likely to make group therapy a more viable option in the future. Group therapy is attractive to therapists and managed care organizations because it can save staff time (and ultimately money) in the care of less severely disturbed patients, and it offers an alternative to inpatient treatment in some cases. However, to take advantage of these opportunities, group therapists need to better educate the public and health care professionals about this mode of treatment, aggressively lobby governments and managed behavioral health care companies to financially support group therapy as a service, and better educate themselves about managed care and the health care needs that remain unfulfilled.

FAMILY AND COUPLES THERAPY

FAMILY THERAPY:

Family therapy is a form of **psychotherapy** that involves all the members of a nuclear or extended family. It may be conducted by a pair of therapists—often a man and a woman—to treat gender-related issues or serve as role models for family members. Although some types of family therapy are based on behavioral or psychodynamic principles, the most widespread form is based on family systems theory, an approach that regards the entire family as the unit of treatment, and emphasizes such factors as relationships and communication patterns rather than traits or symptoms in individual members.

PURPOSE:

The purpose of family therapy is to identify and treat family problems that cause dysfunction. Therapy focuses on improvement in specific areas of functioning for each member, including communication and problem-solving skills.

Family therapy is often recommended when:

- A family member has schizophrenia or suffers from another severe **psychosis**; the goal in these cases is to help other family members understand the disorder and adjust to the psychological changes that may be occurring in the patient.
- Problems cross generational boundaries, such as when parents share a home with grandparents, or children are being raised by grandparents.
- Families deviate from social norms (unmarried parents, gay couples rearing children, etc.). These families may or may not have internal problems, but could be troubled by societal attitudes.
- Members come from mixed racial, cultural, or religious backgrounds.
- One member is being scapegoated, or their treatment in individual therapy is being undermined.
- The identified patient's problems seem inextricably tied to problems with other family members.
- A blended (i.e. step-) family is having adjustment difficulties.

PRECAUTIONS:

Before family therapy begins, family members are required to undergo a comprehensive clinical evaluation (interview) that includes questions of a personal and sensitive nature. Honest communication between the family members and the therapist is essential; people who are not willing to discuss and change behaviors may not benefit from therapy.

Families that may not be considered suitable candidates for family therapy include those in which:

- One or both parents is psychotic or have been diagnosed with antisocial or paranoid personality disorder.
- Cultural or religious values are opposed to, or suspicious of, psychotherapy.
- Some family members cannot participate in treatment sessions because of illness or other physical limitations.
- Individuals have very rigid personality structures and might be at risk for an emotional or psychological crisis.
- Members cannot or will not be able to meet regularly for treatment.
- The family is unstable or on the verge of break-up.

Intensive family therapy may be difficult for psychotic family members.

HISTORY OF FAMILY THERAPY:-

Family therapy is a relatively recent development in psychotherapy. It began shortly after World War II, when doctors who were treating schizophrenic patients noticed that the patients' families communicated in disturbed ways. The doctors also found that patients' symptoms rose or fell according to the level of tension between their parents. These observations led to considering a family as an organism (or system) with its own internal rules, patterns of functioning, and tendency to resist change. When the therapists began to treat the families as whole units instead of focusing solely on the hospitalized member, they found that in many

cases the schizophrenic family member improved. (This does not mean that **schizophrenia** is caused by family problems, although they may aggravate its symptoms).

This approach was then applied to families with problems other than schizophrenia. Family therapy is becoming an increasingly common form of treatment as changes in American society are reflected in family structures; it is also helpful when a child or other family member develops a serious physical illness. Family therapy tends to be short term, usually several months in length, aimed at resolving specific problems such as eating disorders, difficulties with school, or adjustments to bereavement or geographical relocation. It is not normally used for long-term or intensive restructuring of severely dysfunctional families.

In therapy sessions, all members of the family and both therapists (if there is more than one) are present. The therapists try to analyze communication and interaction between all members of the family; they do not side with specific members, although they may make occasional comments to help members become more conscious of patterns previously taken for granted. Therapists who work as a team also model new behaviors through their interactions with each other.

Family therapy is based on systems theory, which sees the family as a living organism that is more than the sum of its individual members and evaluates family members in terms of their position or role within the system. Problems are treated by changing the way the system works rather than trying to "fix" a specific member.

Family systems theory is based on several major concepts:

The identified patient:-The identified patient (IP) is the family member with the symptom that has brought the family into treatment. The concept of the IP is used to keep the family from scapegoating the IP or using him or her as a way of avoiding problems in the rest of the system.

Homeostasis:-This concept presumes that the family system seeks to maintain its customary organization and functioning over time. It tends to resist change. The family therapist can use homeostasis to explain why a certain family symptom has surfaced at a given time, why a specific member has become the IP, and what is likely to happen when the family begins to change.

The extended family field:-The extended family field is the nuclear family plus the network of grandparents and other members of the extended family. This concept is used to explain the intergenerational transmission of attitudes, problems, behaviors, and other issues.

Differentiation:-Differentiation refers to each family member's ability to maintain his or her own sense of self while remaining emotionally connected to the family; this is the mark of a healthy family.

Triangular relationships:-Family systems theory maintains that emotional difficulties in families are usually triangular—whenever any two persons have problems with each other, they will "triangle in" a third member to stabilize their own relationship. These triangles usually interlock in a way that maintains homeostasis. Common family triangles include a child and its parents; two children and one parent; a parent, a child, and a grandparent; three siblings; or, husband, wife, and an in-law.

POSSIBLE RISKS:

There are no major risks involved in receiving family therapy, especially if family members seek the therapy with honesty, openness, and a willingness to change. Changes that result from the therapy may be seen by some as "risks"—the possible unsettling of rigid personality defenses in individuals, or the unsettling of couple relationships that had been fragile before the beginning of therapy, for example.

NORMAL RESULTS:

The goal of therapy is the identification and resolution of the problem that is causing the family's unhealthy interactions. Results vary, but in good circumstances they include greater insight, increased differentiation of individual family members, improved communication within the family, and loosening of previously automatic behavior patterns.

VARIETIES OF FAMILY THERAPY:

Conjoint Family Therapy:

In conjoint family therapy, the entire family is seen at the same time by one therapist. In some varieties of this approach, the therapist plays a, rather passive, nondirective role. In other varieties, the therapist is an

active force, directing the. Conversation, assigning tasks to various family members, imparting, direct instruction regarding human relations, and, so on.

Satir (1967a, 1967b) regarded the family therapist as a resource person who observes the family process in action and then becomes a model of communication to the family through clear, crisp communication. Thus, Satir viewed the therapist as a--teacher, a resource person, and a communicator. Such a therapist illustrates to family members how they can communicate better and thereby bring about more satisfying relationships.

Concurrent Family Therapy:

In *concurrent family therapy*, one therapist sees all family members, but in individual sessions. The overall goals are the same as those in conjoint therapy. In some instances, the therapist may conduct traditional psychotherapy with the principal patient but also occasionally see other members of the family. As a matter of fact, it is perhaps unfortunate that the last variation is not used more often as a part of traditional psychotherapy. Because it is often the case that an individual patient's problems can be understood better and dealt with better in collaboration with significant others in the patient's life. The use of such arrangements should facilitate the therapeutic process.

Collaborative Family Therapy:

In *collaborative family therapy*, each family member sees a different therapist. The therapists then get together to discuss their patients and the family as a whole. As we saw earlier, the use of this approach with child patients was one of the factors that stimulated the early growth of family therapy. In a variation of this general approach, co therapists are sometimes assigned to work with the same family. That is, two or more therapists meet with the family unit.

Behavioral family therapy:

Behavioral family therapy becomes a process of inducing family members to dispense the appropriate reinforcements to one another for the desired behaviors. Indeed, some therapists (Stuart, 1969) even have family members use tokens for this purpose. For example, a husband might earn four tokens if he does not watch Sunday football on TV and instead takes his wife for a drive in the country. Of course, it must be made clear in advance exactly what these tokens may be exchanged for later!

Given the recent developments in cognitive behavioral therapy, it is not surprising that this approach has found its way into the family therapy enterprise. Similar to cognitive-behavioral therapy for the individual, the family "version" involves teaching individual family members to self-monitor problematic behaviors and patterns of thinking, to develop new skills (communication, problem resolution, negotiation, managing conflict), and to challenge interpretations of family events and reframe these interpretation if necessary.

The Couples Therapy:

The focus of couples therapy is to identify the presence of dissatisfaction and distress in the relationship, and to devise and implement a treatment plan. The objectives of treatment are to improve or alleviate the symptoms and restore the relationship to a healthier level of functioning.

Couples therapy, also called marital therapy or marriage counseling, is designed to help intimate partners improve their relationship. Couples therapy is a form of psychological therapy used to treat relationship distress for both individuals and couples.

Purpose:

The purpose of couples therapy is to restore a better level of functioning in couples who experience relationship distress. The reasons for distress can include poor communication skills, incompatibility, or a broad spectrum of psychological disorders that include domestic violence, alcoholism, depression, anxiety, and **schizophrenia**. The focus of couples therapy is to identify the presence of dissatisfaction and distress in the relationship, and to devise and implement a treatment plan with objectives designed to improve or alleviate the presenting symptoms and restore the relationship to a better and healthier level of functioning. Couples therapy can assist persons who are having complaints of intimacy, sexual, and communication difficulties.

Precautions:

Couples who seek treatment should consult for services from a mental health practitioner who specializes in this area.

Patients should be advised that honesty, providing all necessary information, cooperation, keeping appointments on time, and a sincere desire for change and improvement are all imperative to increase the chance of successful outcome. Additionally, a willingness to work "towards" and "with" the process of treatment is essential.

Description:

Couples therapy sessions differ according to the chosen model, or philosophy behind the therapy. There are several models for treating couples with relationship difficulties. These commonly utilized strategies include psychoanalytic couples therapy, object relations couple therapy, ego analytical couples therapy, behavioral couples therapy, integrative behavioral couples therapy, and cognitive behavioral couples therapy.

Psychoanalytical Couples Therapy:

Psychoanalytic therapy attempts to uncover unresolved childhood conflicts with parental figures and how these behaviors are part of the current relationship problems. The psychoanalytic approach tends to develop an understanding of interpersonal interactions (at present) in connection with early development. The success in development of early stages dictates the future behavior of interpersonal relationships. The essential core of this model deals with the process of separation and individuation (becoming a separate, distinct self) from mother-child interactions during childhood. A critical part of this model is introjection. The process of introjection includes introjects (infant processing versions) of the love object (mother). The developmental process of introjection forms the basis an unconscious representation of others (objects) and is vital for development of a separate and defined sense of self. The psychoanalytic approach analyzes marital relations and mate selection as originating from parent-child relationship during developmental stages of the child.

Object Relations Couple Therapy:

The object relations model creates an environment of neutrality and impartiality to understand the distortions and intra-psycho (internalized) conflicts that each partner contributes to the relationship in the form of dysfunctional behaviors. This model proposes that there is a complementary personality fit between couples that is unconscious and fulfills certain needs. This model supports the thought that a "mothering figure" is the central motivation for selection and attachment of a mate. Choosing a "mothering" figure induces further repression (non-development) of portions of personality that were not well-developed (referred to as "lost parts"). This repression causes relationship difficulties.

Ego Analytical Couples Therapy:

Ego analytical approaches utilize methods to foster the ability to communicate important feelings in the couple's relationship. This model proposes that dysfunction originates from the patient's incapacities to recognize intolerance and invalidation of sensitivities and problems in a relationship. According to this model, there are two major categories of problems. The first category of problems relates to dysfunction brought into the relationship from early childhood trauma and experiences. The second involves the patient's reaction to difficulties and a sense of un-entitlement (a personal feeling that one does not deserve something). A patient's shame and guilt are major factors precipitating the thoughts of un-entitlement.

Behavioral Marital Therapy

Behavioral marital therapists tend to improve relationships between a couple by increasing positive exchanges and decreasing the frequency of negative and punishing interactions. This model focuses on the influence that environment has in creating and maintaining relationship behavior. Behavior exchange between partners is flowing continuously and prior histories can affect relationship interactions. Behavior therapy in general is based on the idea that when certain behaviors are rewarded, they are reinforced. The amount of rewards (positive reinforcers) received in relation to the amount of aversive behavior is linked to an individual's sense of relationship dissatisfaction.

Cognitive Behavioral Couples Therapy:

The cognitive approach therapist educates and increases awareness concerning perceptions, assumptions, attributions or standards of interaction between the couple. The central theme for understanding marital discourse using cognitive behavioral therapy is based on the behavioral marital therapy model. A couple's emotional and behavioral dysfunctions are related to inappropriate information processing (possibly "jumping to conclusions," for example) and negative cognitive appraisals. This model attempts to discover the negative types of thinking that drive negative behaviors that cause relationship distress.

Follow Up In Couples Therapy:

Treatment usually takes several months or longer. Once the couple has developed adequate skills and has displayed an improved level of functioning that is satisfactory to both, then treatment can be terminated. An awareness of relapse prevention behaviors and relapsing behaviors is important. (Relapsing behaviors refer to the return to the behaviors that the couple is trying to change or eliminate.) Patients are encouraged to return to treatment if relapse symptoms appear. Follow-up visits and long-term psychological therapy can be arranged between parties if this is mutually decided as necessary and beneficial.

Positive Results:

A normal progression of couple's therapy is relief from symptomatic behaviors that cause marital discourse, distress, and difficulties. The couple is restored to healthier interactions and behaviors are adjusted to produce a happier balance of mutually appropriate interactions. Patients who are sincere and reasonable with a willingness to change tend to produce better outcomes. Patients usually develop skills and increased awareness that promotes healthier relationship interactions.

Risk Factors:

The major risk of couples therapy is lack of improvement or return to dysfunctional behaviors. These tend not to occur unless there is a breakdown in skills learned and developed during treatment, or a person is resistant to long-term change.

Limitations:

There are no known abnormal results from couples therapy. At worst, patients do not get better because they cannot break away from self-induced, self-defeating behaviors that precipitate marital dysfunction and distress. The problems are not worsened if treatment is provided by a trained mental health practitioner in this specialty.

INTRODUCTION AND HISTORY OF COMMUNITY PSYCHOLOGY

At least since the appearance of psychoanalysis, the helping professions have sought to alleviate problems by one form of therapy or another. Some approaches have emphasized insight; others have sought to change behavior more directly. Whatever the differences in approaches, their basic common focus has been on the individual who has already developed psychological problems. By and large, clinical psychology has been a psychology of the individual.

At the theoretical level, therapists have long accepted the idea that all behavior (pathological or otherwise) is a joint product of situational and personal factors. Yet in their day-to-day therapeutic efforts, the emphasis of clinicians was generally on one-to-one therapy of some sort. The troubled individual engaged the help of an expert, and by this act he or she submitted to the role of patient. The clinician treated; the patient responded. However, given the rate of mental health problems in the world today, some have questioned whether this general approach is a reasonable one. For them, a relatively newer approach, community *psychology*, shows great promise for addressing mental health problems.

PRINCIPLES OF COMMUNITY PSYCHOLOGY

What "causes" problems?

Problems develop due to an interaction over time between the individual, social setting, and systems (e.g., organizations); these exert a mutual influence on each other.

How are problems defined?

Problems can be defined at many levels, but particular emphasis is placed on analysis at the level of the organization and the community or neighborhood.

Where is community psychology practiced?

Community psychology is typically not practiced in clinics, but rather out in the field or in the social context of interest.

How are services planned?

Rather than providing services only for those who seek help, community psychologists proactively assess the needs and risks in a community.

What is the emphasis in community psychology interventions?

An emphasis is placed on prevention of problems rather than treatment of existing problems.

Who is qualified to intervene?

Attempts are made to share psychology with others via consultation; actual interventions are often carried out through self-help programs or through trained non-psychologists/

HISTORY

Let us begin by trying to identify exactly that community psychology is. Then we can move to those events that gave rise to the movement. Given above are the set of principles that characterize community psychology, including assumptions regarding the causes of problems, the variety of levels of analysis that can be used to define a problem, where community psychology is practiced, how services are planned, the

emphasis on prevention, and the willingness to "give psychology away" by consulting with self help programs and non psychologists.

THE COMMUNITY PSYCHOLOGY PERSPECTIVE

Community psychology has been described as an approach to mental health that emphasizes the role of environmental forces in creating and alleviating problems (Zax & Specter, 1974). Rappaport (1977) finds it more useful to talk about community psychology in terms of a perspective than to attempt a formal definition. The major aspects of this perspective are cultural relativity, diversity, and ecology (the fit between persons and the environment).

This perspective implies several things.

First, community psychologists should not be concerned exclusively with inadequate environments or persons. Rather, they should direct their attention to the fit between environments and persons—a fit that may or may not be good.

Second, community psychologists should emphasize the creation of alternatives through identifying and developing the resources and strengths of people and communities. Thus, the focus is on action directed toward the competencies of persons and environments rather than their deficits.

Third, the community psychologist is likely to believe that differences among people and communities are desirable. Societal resources, therefore, should not be allocated according to one standard of competence. The community psychologist does not become identified with a single social norm or value, but instead looks to the promotion of diversity.

In Rappaport's (1977) view, three sets of concerns define the community psychology perspective: human resource development, political activity, and science. In many ways, these are antagonistic elements. Political activists are often impatient and deride more traditional clinicians as bringing society too little too late. Clinicians, in turn, often criticize activists as unprofessional and overly concerned with hawking their own visions of the world. Both groups often regard scientists as too far removed from real problems to know what is going on in the world (the "ivory tower" syndrome).

The scientists, in turn are appalled by activists and clinicians alike; both are seen as shockingly willing to act on the basis of invalidated hunches and lack of data or, worst of all, without a viable theory to guide them. However, true societal changes vis-a-vis mental health will require the cooperation of each of these "camps." For example, scientists must provide data to support and direct the efforts of clinicians and political activists, and political activists must assist with funding for scientists so that they can conduct the research that is needed. After all, each camp has the common goal of improved well-being and mental health for individuals, communities, and the larger society.

Whatever else community psychology may be, it is not a field that emphasizes an individual disease or individual treatment model (Iscoe, 1982). The focus is preventive rather than curative. Further, individuals and community organizations are encouraged to take control of and master their own problems (via empowerment) so that traditional professional intervention will not be necessary (Orford, 1992).

CHRONOLOGY AND CATALYZING EVENTS

In 1955, the U.S. Congress passed legislation creating the joint Commission on Mental Health and Illness. Its report encouraged the development of a community mental health concept and urged a reduction in the population of mental hospitals. Based on the premise that psychological distress and the development of mental disorders were influenced by adverse environmental conditions, President Kennedy called for a "bold new approach" to *prevent* mental disorder. The so-called Kennedy Bill of 1963 funded the construction of mental health centers. Their aims were to promote the early detection of mental health problems, treat acute disorders, and establish comprehensive delivery systems of services that would prevent the "warehousing" of chronic patients in mental hospitals (Bloom, 1973).

The American Psychological Association endorsed the desirability of community residents' participating in all these decisions (Smith & Hobbs, 1966) and helped focus attention on the concept of community approaches and participation. A conference held in 1965 is regarded by many as the "official" birth of community psychology (Zax & Specter, 1974). At Swampscott, Massachusetts, a group of psychologists set out to review the status of the field and to plot a future course of development for the place of psychology in the community mental health movement.

Shortly after this conference, the Division of Community Psychology was organized within the American Psychological Association. Soon *The Community Mental Health Journal* and the *American Journal of Community Psychology* began publication. Textbooks began to appear, including books by Zax and Specter (1974), Heller and Monahan (1977), Rappaport (1977), Mann (1978), Heller, Price, Reinhartz, Riger, and Wandersman (1984), and more recently, Orford (1992), Duffy and Wong (1996), and Levine and Perkins (1997). Reviews began to appear regularly in the *Annual Review of Psychology*, and handbooks have been published. Courses in community psychology and programs of graduate training have been established, and there are even books now on the history of community mental health.

To flesh out the foregoing chronology, it will be helpful to pinpoint several issues or concerns that have catalyzed the emergence of community psychology.

TREATMENT FACILITIES:

Although the mental hospital population in the United States peaked at about 500,000 in the mid-1950s, socially oriented clinicians continued to press for alternatives to the costly, inefficient, and often largely custodial hospitalization of patients. Three factors combined at about this time to markedly reduce the population of mental hospitals: the advent of psychotropic medications, a more liberal discharge philosophy, and better treatment in mental hospitals. But as more patients were being discharged, often under heavy medication, and as patients who formerly would have been hospitalized were no longer admitted, the need for better community treatment and supportive services became evident. In some ways a cause but in other ways and effect of these events, the community philosophy was beginning to gain a foothold.

A problem with many mental hospitals was their lack of trained therapists. Regarded by laypersons as a realistic means for solving difficult emotional problems, hospitalization itself often created nearly as many problems as it alleviated. Over the years, mental hospitals (particularly those run by the states) too often became warehouses or custodial bins. Care was often marginal and sometimes downright inhumane. Professional staff was severely lacking in numbers and sometimes in quality. Indeed, many still argue (and have demonstrated empirically) that hospitalization is not an especially effective treatment strategy.

PERSONNEL SHORTAGE:

Even as more clinical psychologists and psychiatrists were trained; demands for their services outstripped their increase in numbers. Many of the newcomers were entering private practice, and others were being diverted into teaching or research. In any event, the supply of trained professionals for service in hospitals and clinics was hardly keeping pace with the demand. A number of trends (Albee, 1959, 1968; Arnhoff, 1968) all seemed to coalesce to produce critical shortages of hospital and clinic personnel. To grapple with these shortages, it became imperative that new sources of personnel be sought, that more effective use be made of professional time, and that new models of coping with human problems be developed. Albee (1959, 1968) predicted that it would be literally impossible to train enough mental health professionals to meet existing and future needs, and recommended that prevention be pursued as a strategy.

QUESTIONS AROUND PSYCHOTHERAPY:

In the 1950s, people began to question not just the efficiency of psychotherapy but also its effectiveness. Some began to wonder if it was not just intra psychic factors that created problems, but the interaction between person and society. At the same time, because psychotherapy was expensive and more and more clinicians and psychiatrists were going into private practice, economic factors were pushing therapy beyond the reach of the poor and disadvantaged. The relationship between mental illness and social class had been documented by Hollingshead and Redlich (1958). Now, it seemed, there was also a relationship between social class and the availability of psychotherapy.

ROLE OF THE MEDICAL MODEL:

We know the widespread role of the medical model and some of the discontent with it. The 1960s ushered in a climate in which institutional prerogatives and traditionalist beliefs came under attack. That climate produced listeners who were more willing to accept attacks on traditional views about mental illness. All of this contributed to an increased tendency to look for the social-community antecedents of problems in lining, rather than internal biological or psychological etiological agents.

The general activism of the 1960s also catalyzed the long-standing discontent of many clinicians with a role that relegated them to waiting passively for society's casualties to walk in the door. Would not an activist role that took mental health services to the people be more consonant with a social-community model? If so, such a role would also provide a measure of autonomy from the dominance of the medical profession. We must not overstate these developments, however. After all a major current trend in clinical psychology has been a headlong rush into private practice. Such behavior is hardly a rejection of the medical model or an acceptance of the social-community approach.

THE ENVIRONMENT:

Another force that helped shape the community psychology movement was a greater awareness of the importance of social and environmental factors in determining people's behavior and problems. Poverty, discrimination, pollution, and crowding were being recognized as potent factors. Providing people with choices and enhancing their well-being required that psychologists pay attention to these factors that they go beyond a reflexive consideration of the early childhood determinants of people's personalities.

The emotional problems of large numbers of people may be influenced by poverty, unemployment, job discrimination, racism, diminished educational opportunities, sexism, and other social factors. Such influences are hardly the ones proposed by psychoanalytic and other theories that seek answers in internal dynamics.

To this point, we have tried to sketch an overall perspective and chronology of community psychology. In the process, we have alluded to several important concepts. Now we will take a closer look at some of these concepts.

THE CONCEPT OF COMMUNITY MENTAL HEALTH

The 1955 Joint Commission on Mental Health and Illness made several basic recommendations that set the tone for the subsequent development of community psychology—a tone that still resonates in accord with political and financial pressures across the nation. These recommendations were

- (1) More and better research into mental health phenomena;
- (2) A broadened definition of who may provide mental health services;
- (3) That mental health services should be made available in the community;
- (4) That an awareness should be fostered that mental illness can stem from social factors (such as ostracism and isolation); and
- (5) That the federal government should support these recommendations financially.

In 1963, federal funds were provided to help in the construction and staffing of comprehensive mental health centers across the United States. To qualify for these funds, a *community mental health center* had to provide five essential services:

- (1) Inpatient care;
- (2) Outpatient care;
- (3) Partial hospitalization (for example, the patient works during the day but returns to the hospital at night);
- (4) Round-the-clock emergency service; and
- (5) Consultation services to a variety of professional, educational, and service personnel in the community.

Beyond these required services, it was hoped that the mental health centers would also provide

- (1) Diagnostic services,
- (2) Rehabilitation services,
- (3) Research,

- (4) Training, and
- (5) Evaluation.

THE CONCEPT OF PREVENTION

The idea of *prevention* is the guiding principle that has long been at the heart of public health programs in this country. Basically, the principle asserts that, in the long run, preventive activities will be more efficient and effective than individual treatment administered after the onset of diseases or problems (Felner, Jason, Moritsugu, & Farber, 1983). That such approaches can work is graphically illustrated by Price, Cowen, Lorion, and Ramos-McKay (1988). Their book, *Fourteen Ounces of Prevention*, describes 14 model prevention programs for children, adolescents, or adults. Prevention programs for adults have been developed and implemented as well.

Primary Prevention:

This type of prevention represents the most radical departure from the traditional *ways* of coping with mental health problems. The essence of the notion-of *primary prevention* can be seen in Caplan's (1964) emphasis on "counteracting harmful circumstances before they have had a chance to produce illness". Albee (1986) points out, however, that the complexity of human problems often requires preventive strategies that depend on social change and redistribution of power. For many in society, this is not a highly palatable prospect. Some examples of primary prevention include programs to reduce job discrimination, enhance school curricula, improve housing, teach parenting skills, and provide help to children from single-parent homes. Also grouped under this heading are genetic counseling, Head Start, prenatal care for disadvantaged women, Meals on Wheels, and school lunch programs.

Secondary Prevention:

This involves programs that promote the early identification of mental health problems and prompt treatment of problems at an early stage so that mental disorders do not develop. The basic idea of *secondary prevention* is to attack problems while they are still manageable, before they become resistant to intervention. Often this approach suggests the screening of large numbers of people. These people are not seeking help, and they may not even appear to be at risk. Such screening may be carried out by a variety of community service personnel, including physicians, teachers, clergy, police, court officials, social workers, and others. Early assessment is followed, of course, by appropriate referrals.

An example of secondary prevention is the early detection and treatment of those individuals with potentially damaging drinking problems (Alden, 1988). A further example is the Rochester Primary Mental Health Project pioneered by Emory Cowen, which began in 1957. The project systematically screens primary-grade children for risk of school maladjustment. The development of early detection and prevention programs in several states has been described by Cowen, Hightower, Johnson, Sarno, and Weissberg (1989).

Tertiary Prevention:

The goal of *tertiary prevention* is to reduce the duration and the negative effects of mental disorders after their occurrence. Thus, tertiary prevention differs from primary and secondary prevention in that its aim is not to reduce the rate of new cases of mental disorder, but to lessen the effects of mental disorder once diagnosed.

A major focus of many tertiary programs is rehabilitation. This can range from increasing vocational competence to enhancing the client's self-concept. The methods used may be counseling, job training, and the like. Whether the purpose of a program is to teach better independent living skills to those with mental retardation or to restore the social skills of recently discharged patient with a diagnosis of schizophrenia, the goal is the prevention of additional problems. Although their language is a bit different, tertiary preventive programs are not very different from person-oriented programs based on a deficit philosophy. However, it

is important to remember that all forms of prevention are distinguished by their attempts to reduce the rates of, or problems associated with, mental disorder on a community-wide (or population-wide) basis.

METHODS OF INTERVENTION AND CHANGE IN COMMUNITY PSYCHOLOGY

Here we will describe the methods of intervention and change in community psychology, our focus will be on patterns of service delivery.

1. CONSULTATION

What is consultation? Orford (1992) offers the following definition:

“Consultation is the process whereby an individual (the consultee) who has responsibility for providing a service to others (the clients) voluntarily consults another person (the consultant) who is believed to possess some special expertise which will help the consultee provide a better service to his or her clients”

In a world short of mental health personnel, the basic advantage of consultation is that its effects are multiplied like the ripples from a stone thrown into a pond. Using individual techniques of intervention, the mental health specialist can reach only a very limited number of clients. But by consulting with other service providers, such as teachers, police, and ministers, he or she can reach many more clients indirectly (Orford, 1992).

Consultation can be viewed from several orientations, each springing from a somewhat different historical perspective.

First, there is mental health consultation. This grew out of the psychoanalytic and psychodynamic tradition. It was often practiced in rural or underdeveloped areas where there was a shortage of mental health personnel. Consultation became a way of using existing community personnel (such as teachers or ministers) to help solve the mental health problems of such areas.

A second orientation developed out of the behavioral tradition. In order to implement the technology of behavior modification that had been so successful in laboratory settings, it was necessary to move into real-life situations. To do that, people in the patient's environment (such as home or school) had to be trained to properly dispense reinforcements for the desired behavior. Consultation became a way of providing such training.

The third orientation is an organizational one that emphasizes consultation to industry. Specialists work with management or work group leaders to improve morale, job satisfaction, and productivity or to reduce inefficiency, absenteeism, alcoholism, or other problems.

TYPES OF MENTAL HEALTH CONSULTATIONS

Approaches to mental health consultation can be classified in many ways. Perhaps the most widely accepted classification is Caplan's (1970). It includes the following categories:

1. ***Client-centered case consultation.*** Here the focus is on helping a specific client or patient to solve a current problem. For example, a clinician might be asked to consult with a colleague on a diagnostic problem involving a specific patient.

2. ***Consultee-centered case consultation.*** In this instance, the aim is to help the consultee enhance the skills that he or she needs in order to deal with future cases. For example, a teacher might be advised on how to selectively reinforce behavior in order to reduce classroom disturbances.

3. ***Program-centered administrative consultation.*** The notion here is to assist in the administration or management of a specific program. For instance, a consultant might be hired to set up an "early warning system" in the schools to detect potential cases of maladjustment.

4. ***Consultee-centered administrative consultation.*** Here the aim is to improve the skills of an administrator in the hope that this will enable her or him to function better in the future. For example, a

sensitivity group consisting of administrators might be monitored by a consultant in order to help enhance the administrators' communication skills.

PHASES OF CONSULTATION

Several general techniques can enhance the effectiveness of the consulting process. In most cases, the consultation process will pass through the following phases:

1. *The entry or preparatory phase.* In the initial phase, the exact nature of the consultant relationship and mutual obligations are worked out.

2. *The beginning or warming-up phase.* In this phase, the working relationship is established.

3. *The alternative action phase.* This phase encompasses the development of specific, alternative solutions and strategies of problem solving.

4. *Termination.* When it is mutually agreed that further consultation is unnecessary, termination follows. Unfortunately, community mental health centers have had difficulty providing consultation services, especially to schools and community agencies; the budgetary support has just not been there. What is particularly troubling about this state of affair that there is empirical support for the efficacy of consultation?

2. COMMUNITY ALTERNATIVES TO HOSPITALIZATION

The nation's mental hospitals have long been objects of criticism. Despite the fact that there is a core of "undischageable" patients, there are alternatives to our current hospital system-alternatives that will provide environments geared to the goal of enabling patients to resume a responsible place in society.

Examples of alternatives include the community lodge. This is akin to a halfway house where formerly chronic, hospitalized patients can learn independent living skills. The Mendota Program (Marx, Test, & Stein, 1973) was a pioneering attempt to help formerly "undischageable" patients find jobs, learn cooking and shopping skills, and so on. Finally, there is the growing popularity of day hospitals that are often more effective and less expensive than traditional 24-hour hospitalization.

3. CRISIS INTERVENTION

The basic goal of crisis *intervention is* to reach people in an acute state of stress and to provide them with enough support to prevent them from becoming the chronically mentally ill of the future. Persons in crisis are often in a uniquely "reachable" state that can pave the way for future long-term interventions.

Crisis intervention requires the relinquishing of traditional procedures and prerogatives. For example, crisis intervention centers must be close to the communities they serve. Clients should not have to travel 20 miles to reach an office or wade through 15 secretaries once they reach it. Obviously, there must be immediate service. Walk-in centers or phone services must be available all day and all night, and appointments should not be required. Staff members must be prepared to leave their office-to go with police or to visit homes.

Finally, crises tend to obliterate customary professional roles, pecking orders, and prerogatives. There is typically no time for discussion of whether a paraprofessional received an A or a B in abnormal psychology, or for a visit from an expert consultant. This is not to suggest that training has no place. However, crisis intervention requires a versatility and flexibility that are not often found in traditional clinics or hospitals.

Early crisis programs were often built largely around telephone answering services. However, it soon became apparent that such services were too slow. Consequently, the emphasis is now on 24-hour services staffed by workers who personally take calls. Current interventions emphasize follow-up both to check on the well-being of the client and to assess the adequacy of the services provided by the agency to which the

client was referred. Current intervention procedures also encourage face-to-face contact rather than the earlier over reliance on the telephone. Emerging interventions even include temporary shelter (such as for battered women and their children), transportation, and follow-up services and consultation to survivors of suicides.

One of the earliest applications of the crisis philosophy was the establishment of suicide prevention centers. An illustrative example is McGee's (1974) development of the Suicide and Crisis Intervention Service (SCIS) in Gainesville, Florida. The policy of SCIS was simply "to respond to every request to participate in the solution of any human problem whenever and wherever it occurs" (McGee, 1974, p. 181, italics deleted). The attitude of the SCIS was that people in crisis were neither sick nor mentally ill. Thus, the service was not necessarily either a medical one or a mental health one.

People in crisis were to be given immediate, active, and aggressive services. SCIS regarded people in crisis as the responsibility of the community and felt that, as citizens, they had a right to expect such a community service. In contrast to many community health organizations that are often at least subtly immersed in intra psychic concepts, the SCIS-type crisis center is organized with the idea of community Control. It is staffed largely by neighborhood volunteers, and it is geared toward the specific characteristics of the immediate community.

Are these interventions really helpful? Although studies on crisis intervention proliferated in the 1970s, we still do not have a definitive answer. Much depends on the questions asked. For example Decker and Stubblebine (1972) found that psychiatric hospitalizations were reduced when crisis intervention procedures were used. Yet when Gottschalk, Fox, and Bates (1973) compared crisis patients with patients who had been randomly assigned to a waiting list, they could find no differences in several indices of psychiatric improvement. Other reports (Getz, Fujita, & Allen, 1975; Huessy, 1972; Maris & Connor, 1973) are much more optimistic. There are obviously many problems in obtaining controls in crisis intervention research. Thus, little can be said with certainty at this point. Not all research shows the efficacy of crisis intervention. However, others argue that additional preventive measures could well reduce the number of deaths from suicide.

Clearly, crisis interventions can help reduce distress. For example, when a teacher commits suicide, interventions must be undertaken to at least try to reduce students' shock (Kneisel & Richards, 1988). When a school bus collides with a train, the survivors must be helped to cope (Klingman, 1987). Under such circumstances, the community cannot wait for the ideal study to demonstrate the utility of an intervention. Public health workers and mental health workers have long been aware of the educational disadvantages experienced by the poor. Of great concern is the fear that early deprivation in crucial developmental periods will mark the child for life. Impoverished preschool environments and experiences may almost guarantee that the child will do poorly in school and thus become vulnerable to a wide variety of mental health, legal, and social problems. But if successful preschool interventions can be developed, then a truly preventive course of action will have been taken.

HEAD START PROGRAMS

The best-known early childhood program is *Head Start*. In the mid-1960s, President Johnson created the Office of Economic Opportunity (OEO). Head Start was one of the programs targeted specifically for disadvantaged children. It was designed to prepare preschool children from disadvantaged backgrounds for elementary school. Head Start programs are locally controlled but required to conform to general federal guidelines. Local programs vary in number of hours of attendance, number of months (summer versus the entire year), background of teachers, and so on. The specific techniques used also vary, but basic learning skills are usually stressed. Physical and medical needs are also addressed, as are general school preparation and adjustment.

5. EVALUATION:

How effective are these early childhood programs? Gomby, Lamer, Stevenson, Lewit, and Behrman (1995) find it useful to distinguish between child-focused programs and family-focused programs. In the former case, interventions are administered directly to the child; in the latter case, family members (such as parents) receive the intervention or training.

Participation in a child-focused program results in an average IQ gain of about 8 points immediately after program completion (although these relative gains dissipate over time), makes it less likely that the child will be placed in special education or retained in grade, and makes it more likely that the child will graduate from high school (Barnett, 1995; Gomby et al., 1995). Positive social outcomes resulting from program participation have also been reported, including fewer contacts with the criminal justice system, fewer out-of-wedlock births, and higher average earnings than non participants (Gomby et al., 1995; Yoshikawa, 1995).

Although family-focused programs appear to have more impact on parents' behaviors than do child-focused programs, it is not clear how much positive impact they have on children (Gomby et al., 1995; Yoshikawa, 1995). Not only is the focus of the intervention different, but so is its intensity and frequency. In the case of family focused interventions, services may be rendered only once a week.

6. SELF-HELP

Not all help comes from professionals. Informal groups of helpers can provide valuable support that may stave off the need for professional intervention. What is more, such nonprofessional *self-help groups* as Alcoholics Anonymous, Parents without Partners, Le Leche League, AlAnon, and many others can be incorporated as an effective part of treatment by a referring professional.

What needs do self-help groups meet? Orford (1992) discussed eight primary functions of self help groups:

- (1) They provide emotional support to members;
- (2) They provide role models-individuals who have faced and conquered problems that group members are dealing with;
- (3) They provide ways of understanding members' problems;
- (4) They provide important and relevant information;
- (5) They provide new ideas about how to cope with existing problems;
- (6) They give members the opportunity to help other members;
- (7) They provide social companionship; and
- (8) They give members an increased sense of mastery and control over their problems.

Clearly self-help group serve several important functions for group members. However, research suggests that professionals should be available to serve as consultants to these groups in order for the groups to be maximally effective. Professionals should not control the group, but a total lack of involvement on the part of a community psychologist does not appear to be helpful either (Orford, 1992). Certain organizational features appear to be correlated with the appraisal of group success, including a certain degree of order and rules to govern the group as well as the capability and knowledge of group leaders (Maton, 1988), and a community psychologist can play an invaluable indirect role by serving as a consultant to group leaders.

THE ROLE OF PARAPROFESSIONALS

One of the more visible features of the community movement is its use of laypersons who have received no formal clinical training, or *paraprofessionals*, as therapists. The use of paraprofessionals in the mental health field has been growing, but this trend has generated controversy. In reviewing 42 studies, Durlak (1979) concluded that professional education, training, and experience are not prerequisites for becoming an effective helping person. However, Nietzel and Fisher (1981) took issue with this conclusion and urged caution in interpreting the results of many of the studies reviewed by Durlak. They argued that many of the studies included in the Durlak review were methodologically flawed, and objected to Durlak's definitions of "professional" and "paraprofessional." With these and other criticisms in mind, Hattie, Sharpley, and Rogers (1984) reanalyzed the studies included in the Durlak review.

Results from their meta-analysis-concurred with those of Durlak. The overall results favored paraprofessionals, especially those who were more experienced and received greater amounts of training. More recent summaries have also argued that the available evidence suggests that paraprofessionals may be as effective as (and in some cases more effective than) professionals.

Besides effectiveness, there is also the issue of access to those who can provide help. Like it or not, most individuals who are in need of mental health services do not seek out mental health professionals. Instead, informal "therapy" takes place in many contexts and is provided by a variety of laypersons. For example, in

an interesting and provocative set of studies, Cowen (1982) 'investigated the "helping behavior" of hairdressers and bartenders. Results indicated that a small but significant proportion of their customers raised moderate to serious personal problems, and both hairdressers and bartenders attempted a range of interventions (for example, just listening, trying to be supportive and sympathetic, presenting alternatives). Many community psychologists view these and other studies as evidence supporting the idea that consultation programs might be aimed at laypersons that naturally come into contact with individuals with mental health needs. These needs might not otherwise be addressed because the target individuals are not likely to seek out help from a mental health professional.

Although it hardly seems wise to argue that professionally trained clinical psychologists are unnecessary, it certainly appears that there is a vital role for paraprofessionals in the mental health field today. Clinical psychologists are needed, at the very least, to serve as consultants. Further, research may ultimately indicate that certain types of mental health problems respond better to services provided by a mental health professional. To date, however, the research questions addressed (for example, are paraprofessionals effective overall?) have been too broad to shed light on this issue.

In a relatively short time, the community emphasis has become a force that has led clinical psychologists to reexamine many of their old assumptions. But there are important questions that must be confronted as we conclude our discussion of this field.

THE TRAINING OF COMMUNITY PSYCHOLOGISTS

At present, many have difficulty in understanding exactly what a community psychologist is. Perhaps because of its multidisciplinary orientation, community psychology has yet to develop an adequate or identifiable theoretical framework apart from those of other disciplines. This, at times, makes for role confusion. The community psychologist is part sociologist, part political scientist, part psychotherapist, part ombudsman, but lacks a specific identity. This ambiguity makes it difficult to design appropriate training programs.

Fortunately, there are some guidelines for training. The recent IOM report (1994) recommends that future prevention research specialists should have a solid background in a relevant discipline (such as nursing, sociology, social work, public health, epidemiology, medicine, or clinical/community psychology). Training in the design of interventions and the empirical evaluations of interventions is essential.

Finally, practicum or internship-like training in prevention is also recommended. Educational requirements for prevention field specialists (those that actually carry out the interventions) are less stringent. Often, a bachelor's degree in a relevant field (such as psychology) is sufficient.

Given the increasing cultural and ethnic diversity in the United States, it is also important for community psychologists to receive training in how diversity issues may impact their work. For example, knowledge of and sensitivity to cultural and ethnic differences will inform the following activities and roles of a prevention researcher (IOM, 1994):

1. Developing relationships with community leaders and organizations
2. Conceptualizing and identifying potential risk factors, mechanisms, and antecedents of problems or disorders
3. Developing interventions that will have maximum effect, and deciding how these should be disseminated and delivered to the target population
4. Determining the content and format of evaluation instruments

In order to achieve "cultural competence" (Cross, Bazron, Dennis, & Isaacs, 1989; Isaacs & Benjamin, 1991), community psychologists need to garner relevant professional experience with a variety of cultural and ethnic populations and to receive supervision from those who have expertise in designing, implementing, and evaluating interventions for individuals from these cultural and ethnic groups.

INTRODUCTION AND HISTORY OF HEALTH PSYCHOLOGY

INTRODUCTION

Our lifestyle affects our health and sense of well-being. Most health problems in the United States are related to chronic diseases (such as heart disease, cancer, and stroke), and these diseases are often associated with behavior or lifestyle choices (such as smoking or overeating) made by individuals. The costs of medical care have skyrocketed to more than 14% of the gross domestic product (GDP), or more than \$898 billion annually. The potential financial burden associated with health problems has led many to reevaluate their lifestyles and behavior. There has also been a shift in perception. Health has become associated with positive well-being rather than simply the absence of disease. These trends, as well as others, have led Americans to focus much more intensely on behaviors and lifestyles that promote health and prevent disease.

Psychology, as a science of behavior, has much to contribute to the field of health, and *health psychology* has become a fast-growing specialty in clinical psychology. One clue that an emerging field has indeed been recognized is the appearance of textbooks and handbooks detailing that field. General textbooks on health psychology are now prevalent (for example, Brannon & Feist, 2000; Rice, 1998; S. E. Taylor, 1999), as are specialized textbooks on clinical health psychology (Belar & Deardorff, 1995; Camic & Knight, 1998), women and health (Blechman & Brownell, 1998), and pediatric health psychology (Goreczny & Hersen, 1999).

In addition, several specialty journals (*including Health Psychology and Journal of Behavioral Medicine*) report on research in these fields. Finally, a separate division of the American Psychological Association () has been established as a way to publicize and advance the contributions of health psychologists.

DEFINITION

Although a variety of definitions have been offered over the years, *behavioral medicine* basically refers to the integration of the behavioral sciences with the practice and science of medicine. Matarazzo (1980) uses the term to refer to the broad interdisciplinary field of scientific investigation, education, and practice that is concerned with health, illness, and related physiological dysfunctions.

Health psychology is a specialty area within psychology. It is a more discipline-specific term, referring to psychology's primary role as a science and profession in behavioral medicine. It includes health-related practice, research, and reaching by many kinds of psychologists—social, industrial, physiological, and others. Health psychology has been specifically defined as

The aggregate of the specific educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, and the identification of etiologic and diagnostic correlates of health, illness and related dysfunction. (Matarazzo, 1980)

This definition was later amended to include psychologists' roles as formulators of health care policy and contributors to the health care system. A recent definition of health psychology that incorporates these new roles has been offered by Brannon and Feist (2000), who state that

Health psychology "includes psychology's contributions to the enhancement of health, the prevention and treatment of illness, the identification of health risk

factors, the improvement of the health care system, and shaping of public opinion with regard to health"

HISTORY

As noted by Rice (1998), two major perspectives have influenced our views of health and illness. First is the biomedical tradition, which developed over time as people sought to gain knowledge through experience and observation. Early attempts were rather crude (for example, the discovery of the benefits of acupuncture. Hippocrates' humoral theory of disease and treatment), but later biomedical scientists focused on anatomy, "germ theory," and ultimately genetics in their attempt to define and understand illness and disease. This Western tendency to focus solely on biological factors and to adopt a reductionistic approach is not without its limitations, however (Rice, 1998). For example, critics argue that we still do not know what causes disease; rather, we have simply discovered another malfunction at a smaller level of analysis (for example, at the DNA level).

Biomedical research may be so charmed with somatic correlates (such as abnormal physical processes and biochemical imbalances) that psychosocial variables are often ignored. Finally this tradition reinforces the mind-body dualism perspective, one that is both outdated and limited in its utility. This is not to say that the biomedical tradition has been unimportant or irrelevant to medicine, science, and psychology. Rather, a strict biomedical viewpoint is at times too narrow because it cannot adequately account for widely encountered forms of illness and disease.

A second major influence on our views of health and illness is the psychosocial perspective (Rice, 1998). For centuries, medical literature has recognized that psychological and social processes may either cause or influence illness and disease. By the 1940s, this broad generalization had coalesced into the field of *psychosomatic medicine*.

Psychosomatic medicine is based on the assumption that certain illnesses and disease states are caused by psychological factors. Researchers (for example, Alexander, 1950) identified several "psychosomatic" diseases, including peptic ulcers, essential hypertension, and bronchial asthma. All illnesses were divided into those caused by "organic" or physical factors and those caused by psychological factors. Some who adopted this perspective believed that each psychosomatic illness had a different, specific underlying unconscious conflict predisposing the person to that disorder.

For example, repressed hostility was believed to result in rheumatoid arthritis. Although initially appealing, these ideas (and psychosomatic medicine in general) began to founder as it became apparent that such specific psychogenic factors were not very predictive; most empirical studies did not support the theories. In fact, psychosocial factors are involved in all diseases, but these factors may not necessarily have a primary causal role.

Psychosomatic medicine was largely the province of psychiatrists and physicians. However, behavioral psychologists began to extend the range of their therapy methods to the so called medical disorders. Problems such as obesity and smoking came under the scrutiny of psychologists as well. Then came a rapid increase in the use of biofeedback to help patients control or modify certain physiological responses.

Another set of factors was slow to develop but ultimately had a strong impact. By the 1960s, many major infectious diseases had been conquered. The helping professions began to turn their attention to two of the biggest killers: cardiovascular diseases and cancer. Behaviors such as overeating, smoking, and drinking were increasingly identified as major correlates of these diseases. The spotlight began to shine not just on the disease process itself, but also on the associated behaviors whose reduction or elimination might reduce individuals' vulnerability to disease.

During the 1960s, stressful life events began to be implicated as specific risk factors for illness (for example, Holmes & Rahe, 1967). The examination of how stressful major life events affect health led to an examination of the health consequences of daily hassles, which can also prove stressful (for example, R. S. Lazarus, 1984). A related line of research demonstrated how personality and behavioral style can influence health. The impetus came from two cardiologists who were impressed with a common constellation of traits and behaviors shared by many who suffered from coronary heart disease. The so-called *Type A* personality (Friedman & Rosenman, 1974) is characterized by hostility, competitiveness, and being time driven. Although subsequent research has failed to support a direct link between Type A personality and heart disease (Brannon & Feist, 2000; Rice, 1998), the hypothesis stimulated research in health psychology and served to focus attention on other behavioral risk factors for coronary heart disease (such as smoking and lack of exercise), as well as on prevention efforts.

The recognition that both psychological and social factors influence illness and health is the basis of an influential perspective known as the *biopsychosocial model* (Engel, 1977). In many ways, this model can be viewed as an integration of the biomedical and psychosocial perspectives. As the name implies, the biopsychosocial model holds that illness and health are a function of biological, psychological, and social influences. Biological influences can include genetic predispositions, nutritional deficiencies, and biochemical imbalances. Psychological influences can include the individual's behaviors, emotions, and cognitions.

Finally, social influences can include friends, family members, home environment, and life events. This biopsychosocial model represents how health psychologists conceptualize problems and plan interventions.

Many other factors were important in the development of the field of health psychology. The tremendous cost of health care has already been noted, along with the fact that infectious diseases were no longer the principal culprits. A large portion of health care costs are directly traceable to human behaviors and lifestyles that result in injuries, accidents, poisonings, or violence. Lifestyle choices such as alcohol and drug abuse, smoking, and dietary patterns contribute to a variety of illnesses and diseases.

The foregoing are just a few of the more prominent factors in the development of the health psychology field. We turn now to a discussion of how stress, lifestyle and behavior, personality, social support, and health are linked. These links form the basis of the field of health psychology.

LINKING HEALTH WITH LIFESTYLE, BEHAVIOR, PERSONALITY, SOCIAL SUPPORT, AND STRESS

What are the processes by which psychological and social factors influence health and disease?

STRESS AND HEALTH:

Although the term stress is frequently used, it is not often precisely defined (Brannon & Feist, 2000). Some use the term to refer to a quality of an external stimulus (such as a stressful interview), others to refer to a response to a stimulus (the interview caused stress), and still others believe stress results from an interaction between stimulus and response (stress resulted because the interview was challenging and I was not prepared).

Most contemporary health psychologists adopt this third, interactionist viewpoint, seeing stress as a process that involves an environmental event (a stressor), its appraisal by the individual (is it

challenging or threatening?), the various responses of the organism (physiological, emotional, cognitive, behavioral), and the reevaluations that occur as a result of these responses and changes in the stressor (Rice, 1998). These and other psychosocial stimuli may contribute to a stress process that can then directly affect the hormonal system, the autonomic system, and the immune system.

The physiological effect of stress on the body involves a complex chain of events (Brannon & Feist, 2000). Stress causes the sympathetic nervous system, a system responsible for mobilizing body resources in urgent situations, to stimulate the adrenal medulla of the adrenal gland. This results in the production of the catecholamines epinephrine and nor epinephrine, whose effects on the body include increased heart rate, respiration, blood flow, and muscle strength. Stress also causes the pituitary gland (a structure connected to the hypothalamus in the forebrain) to release adrenocorticotrophic hormone (ACTH), and ACTH stimulates the adrenal cortex of the adrenal gland to secrete glucocorticoids. The most important glucocorticoid where stress is concerned is cortisol. Cortisol is a hormone that, like epinephrine and nor epinephrine, mobilizes the body's resources. Cortisol serves primarily to increase energy level and decrease inflammation. The latter function is particularly useful if injuries are sustained in an urgent situation.

Although responses of the body to stress can be helpful, severe stress and prolonged activation of these systems can have adverse effects on body organs, mental functions, and the immune system. For example, stress can affect the immune system so that it cannot effectively destroy viruses, bacteria, tumors, and irregular cells. More than two decades ago, Ader and Cohen (1975) presented evidence suggesting that the nervous system and the immune system interact and are interdependent by demonstrating that immune system responses in rats could be classically conditioned. This initial report eventually led to a number of studies investigating the relationship between physiological factors (such as reactions to stress) and immune system response (Brannon & Feist, 2000). Currently it remains unclear whether immunosuppression is a direct effect of stress or whether it is simply part of the body's response to stressful events (Brannon & Feist, 2000). In any case, stress does appear to be an important (though not the only) influence on health and illness.

BEHAVIOR AND HEALTH:

Behaviors, habits, and lifestyles can affect both health and disease. Everything from smoking, excessive drinking, or poor diet to deficient hygiene practices have been implicated. Such behaviors are often deeply rooted in cultural values or personal needs and expectations. In any event, they are not easily changed. We will discuss in more detail several behaviors or lifestyle choices that have been linked to health. These include cigarette smoking, alcohol abuse and dependence, and weight control.

Cognitive variables may influence our decisions about adopting healthy or unhealthy behaviors. To cite one example, many health psychologists have focused on the variable self-efficacy. Self-efficacy, refers to "people's beliefs about their capabilities to exercise control over events that affect their lives" (Bandura, 1989.) Self-efficacy is relevant to a number of topics addressed by health psychologists, including major theories of health-related behavior change. This construct plays a major role in the most prominent social cognitive models of health behavior, including the health belief model (Rosenstock, 1974; Rosenstock, Strecher, & Becker, 1988), protection motivation theory (R. W.V. Rogers, 1975; Sturges & Rogers, 1996), and the theory of planned behavior (Ajzen, 1985, 1988).

Protection motivation theory (PMT), for example, posits that behavior is a function of threat appraisal (an evaluation of factors that will affect the likelihood of engaging in the behavior, such as perceived vulnerability and perceived potential for harm) and coping appraisal (an evaluation of one's ability to avoid or cope with negative outcome). Coping appraisal is influenced by one's self-efficacy or belief that one can implement the appropriate coping behavior or strategy (Maddux et al., 1995).

An example that applies PMT to a real-life health decision may be instructive. Janey, an adolescent girl faced with a decision about whether or not to start smoking cigarettes, according to PMT, would engage in threat appraisal and coping appraisal. Threat appraisal might involve evaluating the dangers of smoking (such as lung cancer) as well as the likelihood of her own vulnerability to this outcome. To the extent that she does not perceive the danger to be severe or immediate to herself. Janey might be more likely to start smoking. Coping appraisal is also relevant. This process might involve Janey's evaluation of how likely it is that she could refrain from smoking (the recommended coping strategy). To the extent that Janey's believes she will not be able to refrain from smoking (for example, because all her friends smokes, it becomes more likely that she will engage in this behavior. Thus, the cognitive variable self-efficacy can play a prominent role in behavior and lifestyle choices that ultimately influence health.

Problems can also arise from the ways in which people respond to illness. Some people may be unable or unwilling to appreciate the severity of their illness and fail to seek timely medical help. When they do get medical advice, they may fail to heed it. All of these behaviors can indirectly foster adverse outcomes.

PERSONALITY FACTORS:

Both directly and indirectly, personality characteristics can affect health and illness in many ways (Friedman & Booth-Kewlev, 1987):

- (1) personality features may result from disease processes;
- (2) personality features may lead to unhealthy behaviors;
- (3) personality may directly affect disease through physiological mechanisms: (4) a third, underlying biological variable may relate to both personality and disease; and
- (5) several causes and feedback loops *may* affect the relationship between personality and disease.

Perhaps the most widely studied association between a personality trait and illness is that between Type A behavior and coronary heart disease. As mentioned previously, the notion of a possible link between personality or coping style and adverse health consequences, specifically coronary heart disease, was proposed by two cardiologists (Friedman & Rosenman, 1974). They identified a set of discriminating personality characteristics and behaviors and proposed that these constitute a *Type A behavior pattern*. Glass (1977) describes Type A individuals as those who tend to:

Perceive time passing quickly,

Show a deteriorating performance on tasks that require delayed responding,

Work near maximum capacity even when there is no time deadline,

Arrive early for appointments,

Become aggressive and hostile when frustrated,

Report less fatigue and fewer physical symptoms,

Are intensely motivated to master their physical and social environments and to maintain control,

A number of early studies suggested a relationship between Type A behavior and coronary heart disease. However, these findings were often misinterpreted as indicating that Type A individuals are

likely to develop coronary heart disease (Davison & Neale, 1998). More recent studies do not show as strong a relationship between Type A behavior and heart disease as was once thought (Smith, 1992), and it is clear that the vast majority of Type A individuals do not develop coronary heart disease (CHD). However, Type A individuals are at relatively greater risk for CHD. More recent studies suggest that the anger-hostility component of the Type A pattern does a better job of predicting coronary heart disease than the more global Type A categorization.

SOCIAL SUPPORT AND HEALTH:

A topic attracting increased research interest is social support and its effects on health and well-being. *Social support* refers not only to the number of social relationships, but also to the quality of those relationships (can you confide in your friends and family members?) The basic idea is that interpersonal ties can actually promote health. They insulate people from harm when they encounter stress, decrease susceptibility to illness, and help people comply with and maintain treatment regimens. Social support is, in many ways, a kind of coping assistance. A number of studies have indicated that better health outcomes are positively related to social support. For example, Williams et al. (1992) followed approximately 1400 patients with coronary artery disease for an average of 9 years, and found that patients who rated higher on measures of social support (for example, married, able to confide in spouses) exhibited significantly lower rates of mortality over the follow-up period. This relation held even after controlling for demographic variables and medical risk factors. This study and others suggest that social support may act as a type of "buffer" against adverse health outcomes.

The relationships among social support stress, and health may depend on a number of factors, including race, gender, and culture. For example, women (on average) seem to benefit more from social support than do men; this may be because women tend to have more emotionally intimate relationships (Brannon & Feist 2000). Preliminary data also suggest that white may benefit from social support more than non whites (Brannon & Feist, 2000). However, the reason for this is not clear, and the possibility of race and ethnic differences needs further study. Clearly, the relationship between social support and health is complex.

RANGE OF APPLICATIONS OF HEALTH PSYCHOLOGY

A full description of all the problems is hard to describe but a partial list culled from recent accounts would include the following:

1. Smoking
2. Alcohol abuse Obesity
3. Type A personality
4. Hypertension
5. Alzheimer's disease
6. Acquired immune deficiency syndrome (AIDS)
7. Cystic fibrosis
8. Anorexia nervosa
9. Chronic vomiting
10. Ulcers
11. Irritable bowel syndrome
12. Tics
13. Cerebral palsy

14. Cerebrovascular accidents

15. Epilepsy

16. Asthma

17. Neurodermatitis

18. Chronic pain

19. Headaches

20. Insomnia Diabetes

21. Dental disorders

22. Cancer

23. Spinal cord injuries

24. Sexual dysfunction

APPLICATIONS OF HEALTH PSYCHOLOGY

Nearly everyone agrees that a few simple behaviors, if widely practiced, would dramatically reduce the toll of human misery and the torrents of dollars pouring into the health care system. These include reducing our consumption of salt and fatty foods, driving carefully and using seat belts, exercising regularly, avoiding cigarettes, and decreasing stress. But giving advice and having people take it are two very different things. Therefore, psychologists, other behavioral specialists, and medical professionals have mounted research programs to learn how to treat and also prevent a variety of potentially harmful human behaviors. *health*: cigarette smoking, alcohol abuse, and weight control.

1. CIGARETTE SMOKING

Increased awareness of the dangers of cigarette smoking has led to a steady decline since the mid-1960s in the percentage of Americans who are habitual smokers (Brannon & Feist, 2000). However, rates of smoking differ according to gender, level of education, and income. One disconcerting trend is that the rate of smoking for women has shown much less of a decline than that for men (Centers for Disease Control and Prevention, 1994). In fact, among white-collar workers, the smoking rate for women now exceeds that for men.

Cigarette smoking has been linked to an increased risk of cardiovascular disease and cancer, the two leading causes of death in the United States. Even though smoking increases one's chances of premature death from diseases such as coronary heart disease, cancers of the respiratory tract, emphysema, and bronchitis, people still smoke. Why? Possible reasons include tension control, social pressure, rebelliousness, the addictive nature of nicotine, and genetically influenced personality traits such as extraversion. Tension control and social pressure are thought to be reasons for initiation of smoking, whereas rebelliousness, addiction, and personality are seen primarily as maintaining factors.

A variety of techniques have been used to induce people to stop smoking, including educational programs, aversion therapy (such as rapid smoking), behavioral contracts, acupuncture, cognitive therapy, and group support (Brannon & Feist, 2000). Relapse rates are high (70-80%), however, and research findings about which cessation approach is best are conflicting. Most smokers who do quit, do so on their own.

The best approach seems to be to prevent the habit from starting in the first place. Unfortunately, education alone (such as warning messages on packages) does not appear to deter young people from smoking (Brannon & Feist, 2000). What appears to be more effective is focusing on immediate rather than delayed negative consequences, teaching coping skills, and increasing feelings of self-efficacy.

One of the early encouraging multiple-component prevention programs aimed at children and teenagers was based on social learning principles and used peer role models (R. I. Evans, 1976). Videotaped presentations, peer modeling, discussion groups, role playing, monitoring smoking, and checking repeatedly on attitudes and knowledge about smoking were all used with elementary school children. Such an approach seems superior to those used with adolescents that focus on long-term negative effects from smoking. The trick seems to be to focus on immediate negative consequences (for example, from peers) rather than delayed ones (such as emphysema).

2. ALCOHOL ABUSE AND DEPENDENCE

It is estimated that about 70% of men and 50% of women in the United States consume alcoholic beverages (United States Department of Health and Human Services, 1993). Although some studies have suggested positive health benefits from alcohol for light or moderate drinkers, consumption of alcohol has also been associated with a number of negative outcomes. Heavy alcohol use has been associated with increased risk for liver or neurological damage, certain forms of cancer, cardiovascular problems, fetal alcohol syndrome, physical aggression, suicide, motor vehicle accidents, and violence (USDHHS, 1997). This extensive list of

alcohol-related problems has made the treatment and prevention of alcohol abuse and alcohol dependence (alcoholism) a high priority.

Over the years, many treatment approaches have been applied to problem drinkers; most of these treatments preach total abstinence. These have ranged from medical treatments and medications such as disulfiram (Antabuse) and naltrexone to traditional psychotherapy and group supportive strategies such as *Alcoholics Anonymous*. However, alcoholism is a problem that has been extremely resistant to virtually all intervention, and the relapse rate is high.

Another, more controversial, approach to the treatment of alcohol problems is *controlled drinking* (Sobell & Sobell, 1978). As the name implies, this approach has as its goal light to moderate (but controlled) drinking. Clients are taught to develop alternative coping responses (other than drinking) and to closely monitor alcohol intake. The field is divided as to the merits of this approach, but research does suggest that controlled drinking is a viable treatment option for some alcoholics (USDHHS, 1997).

Many alcohol treatment programs also incorporate *relapse prevention* training (Marlatt & Gordon, 1985). The majority of clients treated for alcohol problems have a relapse episode soon after treatment is terminated. Rather than see this as a failure (a sign that total relapse is imminent), clients are taught coping skills and behaviors they can use in "high-risk" situations to make total relapse less likely.

Alcohol abuse and dependence are complex problems that will probably require multimodal treatment strategies. Because of the difficulties with secondary and tertiary approaches to treatment or prevention, more and more professionals have turned to primary prevention to forestall the development of problem drinking. For both drinking and drug abuse, programs similar to those designed to prevent adolescents from smoking are being developed.

Often these programs are implemented through health-education courses in high school or media campaigns. School-based prevention programs typically involve one or more of the following components: affective education (building self-esteem, increase decision-making skills); life skills (communication skills, assertiveness training); resistance training (learn to resist pressures to drink alcohol); and correction of erroneous perceptions about peer norms (USDHHS, 1997). Current research evidence suggests that programs that incorporate peer resistance training and correction of misperceptions regarding peer norms show the most promise (USDHHS, 1997).

3. OBESITY

Behavioral treatments for obesity have been more common than for any other condition. One reason for this emphasis is that obesity is associated with such medical disorders as diabetes, hypertension, cardiovascular disease, and certain cancers (Brannon & Feist, 2000). It is also a socially stigmatizing condition that impairs the self-concept and inhibits functioning in a wide array of social settings. Often problems of weight can be traced to childhood: 10-25% of all children are obese, and 80% of these individuals become obese adults (Stunkard, 1979).

Although it is clear that obesity has a genetic component (Meyer & Stunkard, 1993), causes of obesity undoubtedly represent complex interactions among biological, social, and behavioral factors, and exact mechanisms are difficult to pin down. Traditional medical and dietary methods of treatment have not been very effective; obese individuals lose weight but then quickly regain it. Furthermore, the dropout rate may be high in traditional weight-control programs. Most behavior modification programs include components aimed at restricting certain types of foods, teaching when and under what conditions to eat, encouraging regular exercise, and maintaining modified eating patterns after the program has ended.

Again," however, early prevention may be the best and safest road to weight control. An excellent example of such an approach is the Stanford Adolescent Obesity Project (Coates & Thoresen, 1981). A variety of strategies were used with adolescents in the hope that control at this age would lead to prevention in adulthood. The strategies used were self-observation, cue elimination, and social and family support.

These interventions were noticeably more effective when parents were involved. Many investigators are also exploring the possibility of using peer group discussion. A recent ten-year outcome study of a family-

based behavioral treatment for childhood obesity suggests that early intervention in childhood **can effect** important and lasting changes in weight control (Epstein, Valoski, Wing, & McCurley, 1994).

OTHER APPLICATIONS:

Treatment and preventive initiatives must be supplemented with techniques that encourage patients to cope with medical procedures and to follow medical advice.

A. COPING WITH MEDICAL PROCEDURES

The prospect of facing surgery, a visit to the dentist, or a variety of medical examinations has been enough to strike fear into the heart of even the strongest. Faced with such procedures, many patients delay their visits or even forgo them entirely. Health psychologists specializing in behavioral medicine have developed interventions to help patients deal with the stress surrounding such procedures.

B. PREPARATION FOR SURGERY:

A sizable amount of research has been done on ways to improve psychological preparation for surgery. Similar to those used to prepare patients for medical examinations and procedures, interventions include

- (1) relaxation strategies,
- (2) basic information about the procedures to be used.
- (3) information concerning the bodily sensations experienced during the procedures, and
- (4) cognitive coping skills (Brannon & Feist, 2000).

HEALTH PSYCHOLOGY: PROSPECTS FOR THE FUTURE

Health psychology is a growing field, and more psychologists are entering it every year. Therefore, it may now be time for the field to take a look at itself and decide how best to train health psychologists and structure programs to achieve training goals (Belar, 1997). Now we will discuss several health care trends, training issues for future health psychologists, and important issues for the field of health psychology to address in the future.

HEALTH CARE TRENDS

By the end of 1997, 85% of Americans belonged to some kind of managed health care plan (Winslow, 1998). In managed care systems, containing costs is a high priority. We know the great impact managed care has had and will have on clinical psychologists. The impact on health psychologists will be even greater because these specialists often work in medical centers or primary care settings. Health psychologists, by virtue of their training, are well suited to provide interventions that will serve to cut the costs of medical care (Belar, 1997; Friedman, Sobel, Myers, Caudill, & Benson, 1995). As business and industry realize the costs they must absorb from employees whose habits and lifestyles create absenteeism, inefficiency, and turnover, it is expected they will use the skills of health psychologists more often.

Although there appears to be an ever-increasing need for clinical psychologists specializing in health or behavioral medicine, it should also be noted that currently there appears to be a surplus of mental health professionals. For example, Frank and Ross (1995) estimate that there are approximately 32.8 social workers, 22.8 psychologists, 13.1 psychiatrists, and 4.3 psychiatric nurses for every 100,000 Americans (a total of 73 mental health professionals per 100,000). The problem lies in the overlapping definitions of each discipline; all claim to assess and treat similar problems. As the economic stakes become higher, it is likely that these disciplines' self-definitions will incorporate concepts and issues once thought to be uniquely characteristic of health psychology and behavioral medicine. Frank and Ross (1995) call for more coordination of health workforce planning at the national level.

Clearly defining and establishing psychology's role in health care also requires efforts at delineating psychology's unique contributions amid an increasing supply of other health-related professions ... efforts to establish clear professional boundaries and identities among the various health care groups should be based on dialogue, coordination, and cooperation to ensure that the health care needs of the population are met by qualified, ethical, and competent professionals.

TRAINING ISSUES IN HEALTH PSYCHOLOGY

A major source of health psychologists continues to be clinical psychology programs. The scientist-practitioner and clinical scientist models adopted by most clinical psychology programs enable them to train clinicians well suited for health psychology. Until recently, no other psychology specialty offered the combination of academic, scientific, professional, and hospital experiences required for work in medical settings. At the same time, Stroebe and Stroebe (1995) make a case for the background of social psychologists. Again, the roles of methodology, quantitative analysis, and research design are emphasized. Other psychology subspecialties are also well represented in health psychology. Many of the people cited in this chapter are experimental or physiological psychologists—not just clinicians or social psychologists.

For the most *part*, health psychology is still a kind of ad hoc appendage to doctoral programs in psychology. The student enters a clinical, social, or experimental program and then, in addition to the core experience, does some specialized research or takes a practicum or two in a health-related topic. Perhaps this is augmented by an internship at a health care site. But essentially, the health experiences are grafted onto an already existing program in clinical psychology or some other related discipline.

Many people are now calling for health psychology to be a standard, core training component for all professional psychologists (for example, Frank & Ross, 1995). Because of the importance of health issues and the broadening of the definition of clinical and professional psychology, training in areas such as psychopharmacology, neuropsychology, and psychoneuroimmunology is considered essential. Further, future health psychologists must be trained so that they can design and conduct studies to empirically evaluate health outcomes. Currently, some clinical psychology graduate programs offer "tracks" in health psychology or behavioral medicine, but this is the exception rather than the rule. In any case, curricular recommendations for health psychology training continue to be offered (Brannon & Feist, 2000).

OTHER CHALLENGES

Any newly emerging field has problems the defining roles of its members: health psychology is no exception. Years ago, S. E. Taylor (1984) identified several of these problems. One problem is simply role ambiguity. No one is totally prepared to say just what a health psychologist should do—especially in a practical work setting. Health psychologists may actually find themselves without psychology colleagues or role models in the health setting, which only adds to their confusion.

Second, issues of status also arise. In health settings, the physician is clearly at the top of the heap. Sometimes the psychologist enjoys much less status in a medical center setting than, for example, in an academic setting.

Furthermore, the psychologist and the health care professional may have competing goals. The latter may be interested only in identifying immediate ways of helping the patient. The psychologist may be more tentative and contemplative while thinking about research, theoretical models, and interventions.

As one way of establishing their identity and presence in settings traditionally dominated by physicians, health psychologists need to document the cost-effectiveness of their interventions (Friedman et al., 1995). In this era of health care reform, insurance companies and government agencies are scrupulously examining ways to drive down the cost of health care.

Given the many successful and cost-efficient interventions performed by those specializing in health psychology and behavioral medicine, ask Friedman et al. (1995), why haven't these interventions been integrated to a greater extent into our health care system? They suggest several possible reasons:

1. Many of the data supporting the role of health psychology are unknown to physicians.
2. Biological origins of diseases and illnesses have been emphasized, causing many to overlook the possible benefits of psychosocial explanations and behavioral interventions.
3. Patients may be resistant to psychological interventions (and explanations).
4. Clinical health psychology and behavioral medicine are still confused with traditional, long-term psychotherapy.

Clearly, physicians, insurance companies, the 'federal government, and the general public need to be educated regarding the role of health psychologists, as well as the potential financial and clinical benefits of their interventions.

Another challenge for the field concerns ethnicity and health. The health profiles (such as life expectancy and health status) of various ethnic minority populations in the United States appear to differ greatly from one another, and more research is needed on health-promoting and health-damaging behaviors among members of these groups (N. B. Anderson, 1995). Informative articles reporting on the health status of African Americans, Asian Americans, and Hispanic Americans (Flack et al., 1995), behavioral risk factor related to chronic diseases in ethnic minorities (Meyers, Kagawa-Singer, Kumanyika, Lex, & Marlides, 1995), and the use of health care systems by ethnic minorities (Penn, Snehendu, Kramer, Skinner, & Zambrana, 1995) have recently appeared in a special issue of *Health Psychology*. These reports and others point out the need to further assess the relations between behavior and health in special populations.

It is easy to become carried away with the enthusiasm generated by an exciting new field. This has been true in virtually every area of clinical psychology so far. However there is still a gap between the field's promise and its accomplishment. As any experienced clinician will tell you, it is very hard to change human behavior over the long haul. Nevertheless, health psychology most assuredly deserves our enthusiasm as well as our caution. Many people are optimistic about the future of health psychology, given the pressing demands of improved health care. In fact Belar (1997) and others believe that health psychology is uniquely suited to be the specialty for the professional practice psychology in twenty-first century.

NEUROPSYCHOLOGY PERSPECTIVES AND HISTORY

A very important growth area in clinical psychology over the past several decades has been the field of neuropsychology. This growth has been reflected in

- (1) increases in membership in professional neuropsychological associations;
- (2) The number of training programs that offer neuropsychology courses; and (3) the many papers, books, and journals now being published on neuropsychological topics.

As the field moves into its "early adulthood," the primary challenge appears to be health care reform (Meier, 1997). The number of jobs available to clinical neuropsychologist is no longer unlimited, and the clinical services offered by neuropsychologists will need to be provided at lower cost and higher effectiveness (Meier, 1997). Let us begin, however, by taking a step back in order to get a better sense of how this field developed as well as the roles of neuropsychologists.

As the term would suggest, neuropsychologists have a foot in both the psychological and neurological domains. While some have received their basic training in clinical psychology, others have been trained by neurologists.

DEFINITION:

What *is neuropsychology*? Most simply, it can be defined as the study of the relation between brain function and behavior.

“It deals with the understanding assessment, and treatment of behaviors directly related to the functioning of the brain” (Golden, 1984).

Neuropsychological assessment is a non-invasive method of describing brain functioning based on a patient's performance on standardized tests that have been shown to be accurate and sensitive indicators of brain-behavior relationships.

The neuropsychologist may address issues of cerebral [brain] lesion lateralizations, localization, and cerebral lesion progress. Neuropsychological evaluations have also provided useful information about the impact of a patient's limitations on educational, social, or vocational adjustment. Since many patients with neurological disorders, such as degenerative diseases, cerebrovascular accident, or multiple sclerosis, vary widely in the rate at which the illness progresses or improves, the most meaningful way to assess patients for the severity of their condition is to assess their behavior objectively via neuropsychological assessment procedures.

ROLE OF NEUROPSYCHOLOGISTS

Neuropsychologists function in a number of different roles (Golden et al., 1992). First, neuropsychologists are often called on by neurologists or other physicians to help establish or rule out particular diagnoses. For example, a patient may present with a number of symptoms that may have either a neurological or an emotional basis. Neuropsychological test results may help clarify the diagnosis in this situation. Second, because of an emphasis on functional systems of the brain neuropsychologists can often make predictions regarding the prognosis for recovery. A third major role involves intervention and rehabilitation. Information provided by neuropsychologists often has important implications for treatment; test results provide guidance as to which domains of functioning may support rehabilitative efforts. Finally, neuropsychologists may be asked to evaluate patients with mental disorders in order to help predict the course of illness (based on, for example, the degree of cognitive impairment present) as well as to help tailor treatment strategies to patients' strengths and weaknesses (Keefe, 1995).

With these definitions and descriptions of the roles of neuropsychologists in mind, we now turn to a brief history of the field.

HISTORY OF NEUROPSYCHOLOGY

Theories of Brain Functioning. As in most areas of psychology, the historical roots of neuropsychology extend about as far back in time as we are inclined to look. Some authors point to the Edwin Smith Surgical Papyrus, a document thought to date between 1700 and 3000 B.C., which discusses localization of function in the brain (Walsh & Darby, 1999). Others suggest that it all began when Pythagoras said that human reasoning occurs in the brain. Others are partial to the second century A.D. when Galen, the Roman physician argued that the mind was located in the brain, not in the heart as Aristotle had claimed.

However, the most significant early base for neuropsychology seems to have been laid in the nineteenth century (Hartlage, 1987). Researchers then were beginning to understand that damage to specific cortical areas was related to impaired function of certain adaptive behaviors. The earliest signs of this understanding came with Franz Gall and his now discredited phrenology. Gall believed that certain individual differences in intelligence and personality (such as reading skills) could be measured by noting the bumps and indentations of the skull. Thus, the size of a given area of the brain determines the person's corresponding psychological capacity. This was the first popularization of the notion of *localization of function*. Localization achieved much greater credibility with Paul Broca's surgical work in 1861. Observations from two autopsies of patients who had lost their powers of expressive speech convinced Broca that he had found the location of motor speech. Within the next 30 to 40 years, many books presented maps of the brain that located each major function (Golden, 1984).

Others, such as Pierre Flourens, would surgically destroy certain areas of the brains of animals and then note any consequent behavioral losses. Such work led Flourens and later, in the early twentieth century, Karl Lashley to argue for the concept of *equipotentiality*. That is, although there certainly is localization of brain function, the cortex really functions as a whole rather than as isolated units. In particular, higher intellectual functioning is mediated by the brain as a whole, and any brain injury will impair these higher functions. Yet there is the ability of one area of the cortex to substitute for the damaged area.

Both the localization and equipotentiality theories presented some problems, however. Localizationists could not explain why lesions in very different parts of the brain produced the same deficit or impairment, whereas those adhering to the equipotentiality theory could not account for the observation that some patients with very small lesions manifested marked, specific behavioral deficits (Golden et al., 1992).

An alternative theory that integrates these two perspectives is the *functional model*. First proposed by the neurologist Jackson and later adapted by the Soviet neuropsychologist Luria, the functional model holds that areas of the brain interact with each other to produce behavior. Behavior "*is conceived of as being the result of several functions or systems of the brain areas, rather than the result of unitary or discrete brain areas. A disruption at any stage is sufficient to immobilize a given functional system*" (Golden et al., 1992). The importance of this formulation is that it can account for many of the clinical findings that are inconsistent with previous theories.

According to the functional model, the nature of the behavioral deficit will depend on *which* functional system (such as arousal, perception, or planning behavior) has been affected, as well as the localization of the damage within that functional system. Finally, through a process called reorganization, recovery from brain damage is sometimes possible.

NEUROPSYCHOLOGICAL ASSESSMENT:

With regard to specific psychological assessment instruments, neurology was for a long time bewitched by notions of mass action of brain functioning. These ideas tended to make localization of function a secondary goal of diagnosis, and brain damage was often viewed as a unitary phenomenon. The

psychological tests used (for example, the Benton Visual Retention Test and the Graham-Kendall Memory-for-Designs Test) were oriented toward the simple assessment of the presence or absence of brain damage. Information about specific test correlates of specific brain lesions was not collected very efficiently.

Neuropsychology as a field began to grow immediately after World War II, because of (1) the large numbers of head injuries in the War and (2) the development of the field of clinical psychology itself (Hartlage, 19871). An important development of the postwar period was the work of Ward Halstead. By observing people with brain damage in natural settings, Halstead was able to identify certain specific characteristics of their behavior. Next, he tried to assess these characteristics by administering a variety of psychological tests to these patients.

Through factor analysis, he settled on ten measures that ultimately comprised his test battery. Later, Ralph Reitan, a graduate student of Halstead's, refined the battery by eliminating two tests and adding several others. Subsequently, Reitan and his colleagues could relate test responses to such discrete aspects of brain lesions as lateralized motor deficits. This work culminated in the Halstead Reitan Neuropsychological Test Battery. By 1980 the Luria-Nebraska Neuropsychological Battery had been developed, and it is now frequently used as an alternative to the Halstead-Reitan Battery. We'll have more to say about these and other neuropsychological tests in a later section.

An additional historical development deserves mention here. Contemporary clinical neuropsychologists have increasingly adopted a flexible battery approach to assessment; Flexible batteries allow each assessment to be tailored to the individual, based on the clinical presentation and on the hypotheses of the neuropsychologist. Standard batteries, such as the Halstead-Reitan and the Luria-Nebraska, may be too time consuming and are not easily modified to accommodate specific clinical situations.

THE BRAIN: STRUCTURE, FUNCTION, AND IMPAIRMENT

Before proceeding, it will be helpful to review) the important aspects of the brain. This will, of necessity, be a brief excursion.

STRUCTURE AND FUNCTION

The brain consists of two hemispheres. The *left hemisphere* controls the right side of the body and is thought to be more involved in language functions, logical inference, and detail analysis in almost all right-handed individuals and a good many left-handers as well. The *right hemisphere* controls the left side of the body. It is more involved in visual-spatial skills, creativity, musical activities, and perception of direction. But, again, note that some left-handers may reverse this hemispheric pattern. The two hemispheres communicate with one another via the *corpus callosum*, which helps to coordinate and integrate our complex behavior.

Each cerebral hemisphere has four lobes: the frontal, temporal, parietal, and occipital lobes. The *frontal lobes* are the most recently developed parts of the brain in terms of evolution. They enable us to observe and compare our behavior and the reactions of others to it in order to obtain the feedback necessary to alter our behavior to achieve valued goals. Also associated with the frontal lobes are executive functions—formulating, planning, and carrying out goal-directed initiatives. Finally, emotional modulation the ability to monitor and control one's emotional state—is also associated with frontal lobe functioning.

The *temporal lobes* mediate linguistic expression, reception, and analysis. They are also involved in auditory processing of tones, sounds, rhythms, and meanings that are non language in nature. The *parietal lobes* are related to tactile and kinesthetic perception, understanding, spatial perception, and some language understanding and processing. They are also involved in body awareness. The *occipital lobes* are mainly oriented toward visual processing and some aspects of visually mediated memory. Motor coordination, as well as the control of equilibrium and muscle tone, is associated with the *cerebellum*.

ANTECEDENTS OR CAUSES OF BRAIN DAMAGE

What causes brain damage? There are a number of possibilities.

1. Trauma:

It is estimated that head injuries occur in more than 2 million Americans every year. Incidents producing these injuries range from auto-mobile accidents to falls off a stepladder. The outcomes are wide-ranging, and the nature of the head injury (such as closed versus open/penetrating) may have implications as well. Although most head injuries are considered mild, substantial percentage of cases requires hospitalization. Head trauma is the leading cause of death and disability in young Americans (R. J. Smith et al., 1997).

The major effects of head trauma can be categorized as concussions, contusions, and lacerations. *Concussions* (jarring of the brain) usually result in momentary disruptions of brain function although permanent damage is uncommon (unless there are repeated concussions, as might be the case in football, soccer, or boxing, for example). *Contusions* refer to cases in which the brain has been shifted from its normal position and pressed against the skull. As a result, brain tissue is bruised. Outcomes can often be severe and may be followed by comas and deliriums. *Lacerations* involve actual ruptures and destruction of brain tissue. They can be caused by bullets or flying objects, for example. These lacerations are of course, exceedingly serious forms of damage.

2. Cerebro-vascular Accidents:

The blockage and rupture of cerebral blood vessels is often termed "stroke." This is a very common cause of brain damage in adults, and stroke is one of the leading causes of death in the United States (and other countries). Although primarily occurring in the elderly, stroke is also one of the most common causes of death in middle-aged adults (Mora & Bornstein, 1997). In *occlusions* a blood clot blocks the vessel that feeds a particular area of the brain.

This can result in aphasia (language impairment), apraxia (inability to perform certain voluntary movements), or agnosia (disturbed sensory perception). In the case of a *cerebral hemorrhage*, the blood vessel ruptures and the blood escapes onto brain tissue and either damages or destroys it. The exact symptoms that ensue depend on the site of the accident and its severity. In very severe cases, death is the outcome. Those who survive often show paralysis, speech problems, memory and judgment difficulties, and so on.

It is very important to get stroke patients to the hospital immediately. Medications that essentially dissolve occlusions ("clot-busting" medications) can limit the permanent damage from occlusive strokes. In addition, new medications are being developed that prevent the cascade of chemical reactions responsible for neuronal damage or even death (for example, tissue plasminogen activator). Therefore, in many cases, prompt action can be of major benefit.

3. Tumors:

Brain tumors may grow outside the brain, within the brain, or result from metastatic cells spread by body fluids from some other organ of the body, such as the lung or the breast. Initial signs of brain tumors are often quite subtle and can include headaches, vision problems, gradually developing problems in judgment, and so on. As the tumor grows, so does the variety of other symptoms (such as poor memory, affect problems, or motor coordination).

Tumors can be removed surgically, but the surgery itself can result in more brain damage. Some tumors are inoperable or located in areas too dangerous to operate on. In such cases, radiation treatments are often used.

4. Degenerative Diseases:

This group of disorders is characterized by a degeneration of neurons in the central nervous system. Common degenerative diseases include Huntington's chorea, Parkinson's disease, and Alzheimer's disease and other dementia. Alzheimer's disease is the most common degenerative disease (age of onset is typically

65 years old or older), followed by Parkinson's disease (age of onset 50 to 60 years old), and finally Huntington's chorea (age of onset 30 to 50 years old).

In all three cases, there is progressive cerebral degeneration along with other symptoms in the motor areas. Eventually, patients in these categories show severe disturbances in many behavioral areas, including motor, speech, language, memory, and judgment difficulties.

5. Nutritional Deficiencies:

Malnutrition can ultimately produce neurological and psychological disorders. They are most often observed in cases of Korsakoff's psychosis (resulting from nutritional problems brought about by poor eating habits common in longtime alcoholics), pellagra (niacin/vitamin B-3 deficiency), and beriberi (thiamin/vitamin B-1 deficiency)

6. Toxic Disorders:

A variety of metals, toxins, gases, and even plants can be absorbed through the skin. In some instances, the result is a toxic or poisonous effect that produces brain damage. A very common symptom associated with these disorders is *delirium* (disruption of consciousness).

7. Chronic Alcohol Abuse:

Chronic exposure to alcohol often results in tolerance for and dependence on the substance. Tolerance and dependence appear to have neurological correlates, including, for example, changes in neurotransmitter sensitivity and shrinkage in brain tissue.

Several regions of the brain seem especially vulnerable to damage from chronic exposure to alcohol (U.S. Department of Health and Human Services, 1997). We will highlight only a few of the most consistent findings here. The limbic system is a network of structures within the brain associated with memory formation, emotional regulation, and sensory integration. Studies of alcoholics have indicated deficits in these areas of functioning. The diencephalon is a region near the center of the brain that includes the mammillary bodies of the hypothalamus.

Studies suggest shrinkage or lesions in these areas as a result of chronic alcohol exposure, and memory deficits in alcoholics are consistent with these findings. Several studies have also reported findings that suggest alcoholics evidence atrophy of the cerebral cortex. Finally, damage to the cerebellum, responsible for motor coordination, is also well documented. A history of accidental falls or automobile accidents may suggest neurological damage resulting from alcohol abuse/dependence.

CONSEQUENCES AND SYMPTOMS OF BRAIN DAMAGE

Brain injury or trauma can produce a variety of cognitive and behavioral symptoms. Unfortunately for the diagnostician, many of these symptoms may also occur in connection with traditional mental disorders. Moreover, patients' responses to neurological impairment may give rise to psychological and emotional reactions. For example, an individual with neurological damage may become depressed over the inability to manage certain daily tasks. This, in turn, can easily obscure the process of differential diagnosis.

These difficulties aside, several common symptoms associated with neurological damage are listed below. However, each of these may occur in every disorder, and there is considerable variation among patients with the same disorder

1. *Impaired orientation*: inability, for example, to say who one is, name the day of the week, or know about one's surroundings.

2. *Impaired memory*: patient forgets events especially recent ones, sometimes confabulates or invents memories to fill the gaps, and may show impaired ability to learn and retain new information.

3. Impaired intellectual functions: comprehension, speech production, calculation, and general knowledge may be affected (for example, cannot define simple words, name the U.S. president, or add figures).

4. Impaired judgment: patient has trouble with decisions (for example, cannot decide about lunch, when to go to bed, and so on).

5. Shallow and labile affect: person laughs or weeps too easily and often inappropriately; shifts from joy to tears to anger, for example, very rapidly.

6. Loss of emotional and mental resilience: patient may function reasonably well under normal circumstances, but stress (for example, fatigue, mental demands: emotional upset) may result in deterioration of judgment, emotional reactions, and similar problems.

BRAIN-BEHAVIOR RELATIONSHIPS

In the second half of the nineteenth century, localization of function became a popular view. The idea that specific areas of the brain control specific behaviors is still an important operating principle among neuropsychologists. Such a principle means that in assessing brain damage, a chief concern is *where* the injury is located in the brain. Extent of an injury is important only to the degree that larger injuries tend to involve more areas of the brain indeed; some tumors may produce intracranial pressure that impairs areas located far from the tumor itself. The basic idea; however is that same-sized lesions in different regions of the brain will produce different behavior deficits.

But according to equipotential theory, all areas of the brain contribute equally to overall intellectual functioning (Krech, 1962). Location of injury is secondary to the amount of brain injury. Thus, all injuries are alike except in degree. Equipotentialists tend to emphasize deficits in abstract, symbolic abilities, which are thought to accompany all forms of brain damage and to produce rigid, concrete attitudes toward problem solving. Such views have led to the development of tests that attempt to identify the basic deficit common to all cases of brain damage. Unfortunately, such tests have not worked well enough for everyday clinical use (Golden, 1981).

Many investigators have been unable to accept either localization or equipotentiality completely. Thus, alternatives such as the one proposed by Hughlings Jackson (Luria, 1973) have become prominent. Although, according to Jackson, very basic skills can be localized, the observable behavior is really a complex amalgamation of numerous basic skills, so the brain as an integrated whole is involved. This functional model of the brain subsumes both localization and equipotential theory. Further, according to Luria (1973), very complex behaviors involve complex functional systems in the brain that override any simple area locations. Because our ability to abstract is a complex intellectual skill, for example, it involves many systems of the brain.

Brain damage can have many effects, involving visual perception, auditory perception, kinesthetic perception, voluntary motor coordination and functioning, memory, language, conceptual behavior, attention, or emotional reactions. Often clinicians are called upon to determine the presence of intellectual deterioration. This goes beyond the measurement of present functioning because it involves an implicit and explicit comparison to a prior level. Generally speaking, intellectual deterioration may be of two broad types:

(1) a decline resulting from psychological factors (psychosis, lack of motivation, emotional problems, the wish to defraud an insurance company, and so on); and

(2) a decline stemming from brain injury. Of course, assessment would be a good deal easier if the clinician had available a series of tests taken by the patient prior to injury or illness. Such premorbid data would provide a kind of baseline against which to compare present performance. Unfortunately, clinical psychologists seldom seem to have such data on the patients they most need to diagnose. They are left to infer patient's previous level of functioning from case history information on education, occupation, and

other variables. Over the years, clinicians have used such signs of premorbid functioning in a rather intuitive fashion, without much empirical evidence for their validity.

INTERVENTION AND REHABILITATION

Issues of neurological impairment usually revolve around two principal questions. First, what is the nature of the deterioration or damage? For example, is it a perceptual loss or a cognitive loss? Second, is there any real brain damage that can account in some way for the patient's behavior? More specifically, is the damage permanent, or can recovery be expected after an acute phase? Is the damage focal or diffused throughout the brain? In general, focal damage results in more specific, limited effects on behavior, whereas diffuse damage can cause wide effects.

Referral sources often need to know whether the damage will be progressive as in diffuse brain involvement or in damage caused by disease or nonprogressive (as is often true in the case of strokes or head traumas). Answers provided by clinical neuropsychologists significantly affect the kinds of rehabilitation programs designed for various patients.

Rehabilitation is becoming one of the major functions of neuropsychologists (Golden et al., 1992). The neuropsychologist is often thrust into the role of coordinating the cognitive and behavioral treatment of patients who have shown cognitive and behavioral impairment as a result of brain dysfunction or injury. First, a thorough assessment of the patient's strengths and deficits is conducted; this may include not only neuropsychological test results but also observations from other staff members, such as nurses, physicians and physical therapists. A program of rehabilitation is then developed that will be maximally beneficial to the patient, given her or his deficits, as well as one that will be efficient in the sense of requiring a minimum amount of staff time and supervision (Golden et al., 1992).

Rehabilitation can take place through spontaneous recovery of functioning. However, the neuropsychologist and the rehabilitation team are more likely to be involved when rehabilitation is to be accomplished by having the patient "relearn" via developmentally older and intact functional systems. The development of new functional systems. Or changing the environment to ensure the best quality of life possible. In this last case, the judgment may be that it will not be possible to develop alternative or new functional systems that will significantly lessen the level of cognitive or behavioral impairment.

In the case of developing alternative or new functional systems, rehabilitation tasks are formulated to "treat" the patient's deficits. Golden et al. (1992, pp. 214-215) offer the following general guidelines for formulating this type of rehabilitation task:

1. It should include the impaired skill that one is trying to reformulate. All other skill requirements in the task should be in areas with which the subject has little or no trouble.
2. The therapist should be able to vary the task in difficulty from a level that would be simple for the patient to a level representing normal performance.
3. The task should be quantifiable, so that progress can be objectively stated.
4. The task should provide immediate feedback to the patient.
5. The number of errors made by the patient should be controlled.

Golden et al. (1992) give examples of rehabilitation programs for various cognitive and behavioral deficits. For example, verbal memory impairment might be treated by administering simple memory problems (those involving one unit of information) to the patient and then. Later, more complex tasks (for example, a problem enquiring the memorization of six or seven units of information). The complexity of the task can be varied further by, for example. Using unrelated words or decreasing the time of exposure to the stimulus words.

METHODS OF NEUROLOGICAL ASSESSMENT

WHAT IS A NEUROLOGICAL ASSESSMENT?

Neurological assessment was traditionally carried out to assess the extent of impairment to a particular skill and to attempt to locate an area of the brain which may have been damaged after brain injury or neurological illness. With the advent of brain imaging techniques, location of brain damage can now be accurately determined so the focus has now moved onto the measurement of *cognition and behavior*, including examining the effects of any brain injury or neuropsychological process that a person may have experienced. A core part of neurological assessment is the administration of neurological tests for the formal assessment of cognitive functioning. Aspects of cognitive functioning that are assessed typically include orientation, new-learning/memory, intelligence, language, visuoperception, and executive-control/self-awareness. However, clinical neurological assessment is more than this and encompasses a focus also on a person's psychological, personal, interpersonal and wider contextual circumstances.

Assessment may be carried for a variety of reasons, such as: Clinical evaluation, to understand the pattern of *cognitive strengths* as well as any difficulties a person may have, and to aid decision making for use in a medical or rehabilitation environment.

Miller outlined three broad goals of neurological assessment.

- Firstly, diagnosis, to determine the nature of the underlying problem.
- Secondly, to understand the nature of any brain injury or resulting cognitive problem and its impact on the individual,
- And lastly, assessments may be undertaken to measure change in functioning over time.

DEFINITION:

“Neuropsychology is the study of brain-behavior relationships”.

Clinical Neuropsychology combines the knowledge base developed through classical, localizationalist neurology with the modern methods of American psychometric psychology.

The objectives of neuropsychological assessment in clinical practice are to assess and diagnose disturbances of mentation and behavior and to relate these findings to their neurological implications and to the issues of clinical treatment and prognosis. (By Gregory P. Lee, PhD)

The clinical neuropsychologist offers a variety of services, including the assessment of the psychological-behavioral effects of real or suspected brain lesions, the diagnosis of organic brain conditions, and the planning and implementation of rehabilitation programs for brain injured patients.

At a time when clinical psychologists' interest in traditional psychological assessment techniques (Rorschach, Thematic Apperception Test, Bender Gestalt, and so on) has decreased, interest in clinical neuropsychological evaluation procedures has risen markedly.

Historically, the field of neuropsychology evolved from a lesion localization model (e.g., trauma to a particular part of the brain leads to a particular kind of deficit) and from studies of the effects of neurological disease, primarily in adults, on cognitive functioning. At present, behaviors are further defined and linked to brain processes through the use of new technologies (e.g., neuroimaging or brain scans). The neuropsychologist endeavors to assess different domains of functioning (e.g., attention, memory, problem

solving) in order to generate a profile of strengths and weaknesses that can inform treatment planning and adaptation in daily life.

A neuropsychological assessment typically evaluates multiple areas of functioning. It is not restricted to measures of intelligence (e.g., IQ) and achievement but examines other areas of functioning that also have an impact on performance in the classroom, with peers, at home, or on the job. The following represents a set of cognitive functions that is likely to be assessed:

- Sensory perceptual and motor functions
- Attention
- Memory
- Auditory and visual processing
- Language
- Concept formation and problem solving
- Planning and organization
- Speed of Processing
- Intelligence
- Academic skills
- Behavior, emotions, and personality

WHAT INFORMATION DOES NEUROPSYCHOLOGICAL ASSESSMENT PROVIDE?

A comprehensive assessment can yield information to assist in distinguishing one disorder from another as well as better clarifying its nature. The diagnostic referral question may also involve discriminating between neurological and psychiatric disorders. In addition, based on knowledge of brain-behavior relationships, evidence for dysfunction in one region of the brain may tell us something about other difficulties that might be present.

In this regard, knowing more about the *individual's strengths and weaknesses* can assist in interpreting their behaviors and guiding program/treatment planning. For example, a parent or teacher may observe: 'It feels like I have to teach Sara everything, every time.' Underlying this behavior may be deficits in identifying the rules for more abstract concepts, identifying or discovering the common (or "unwritten") principle, discriminating relevant versus irrelevant information, or memory.

Finally, a written report should be provided following completion of the assessment that can be shared with those involved in the individual's care. Reasons for referral, Background information (history and current concerns), Tests administered, Behavioral observations, Test results and interpretation, Summary of impressions, Recommendations and need for referrals to other specialists

APPROACHES TO NEUROLOGICAL EVALUATION:

Neuropsychologist make inferences regarding an individual's neurological functioning based on measures of behavior (neuropsychological test performance). In the neuropsychological exam, an attempt is made to elicit the individual's best performance in order to measure his or her maximum capability or potential. This information is helpful from the standpoint of both assessment and rehabilitation.

Another very important conceptual issue in the neuropsychological examination has to do with the *premorbid level of functioning*. Inferences regarding an individual's present neurological condition are based on an assumed change in neurological status. To assess the degree of change, it is necessary to obtain an estimate of premorbid level of ability against which to compare the current level of functioning. Such an estimate can be reconstructed from a variety of sources, including academic and employment history, reports from the family, and previous standardized test scores, where such data are available.

Lezak (1976) discusses 2 methods. The first is based on the assumption that certain well established abilities, such as vocabulary skills and fund of general information, are frequently preserved in individuals with brain injury, while other skills are impaired. A clinician using this method examines the level of performance on tasks like the vocabulary and information subtests of the WAIS and compares this performance with other neuropsychological test scores. However, the clinician must be careful, since certain localized injuries (mainly of the left hemisphere) often produce deficits in language usage that may severely compromise the individual's verbal skills.

The second method assumes that the individual's best current performance provides the closest approximation to his original ability level;” hence the clinician simply looks for the highest scores or set of scores.

Again, caution is warranted, since some patients are so severely impaired that all test scores are depressed. Lezak warns that a single high test score on a memory task may not be a good estimate of premorbid level of functioning, since memory is the least reliable indicator of general intellectual ability of all intellectual functions.

There are several other methodological approaches that neuropsychologist use in evaluating and interpreting a given patient's performance. No single approach is itself satisfactory, but when they are used in concert each approach supplements the other.

The more common approaches are level of performance, pattern analysis, pathognomonic signs, and right-left differences. Each is described more fully below.

1. Level Of Performance:

In the level of performance approach, the patient is administered tests that are sensitive to cerebral impairment. The patient's scores on such tests are compared to normative levels that have an established degree of accuracy in differentiating brain-damaged from non-brain damaged persons. Thus if a given patient scores higher than the cutoff score on this test, this performance is considered typical of organically impaired individuals and there is some probability that he does have brain dysfunction. This approach, when used alone, has many problems associated with it. Some non-brain damaged patient's score in the brain damaged range for reasons having nothing to do with the intactness of their cerebral cortices.

In the past, many psychologists used the *Bender Gestalt* as a single measure of organicity. This is an inappropriate use of this test; although the Bender may be of help in the diagnosis. It is by no means sufficient, because it provides just one bit of data about the patient.

Another problem with the level of performance approach particularly when a single test is used is that a patient may do well on this test despite having significant deficits in other areas of higher cortical functioning. For example, right handed patient with lesions in the left temporal lobe may perform well on a measure of visual constructive abilities such as the Bender Gestalt, but do very poorly on measures of language functioning. Brain damage is not a unitary concept: its effects may vary widely and can be pervasive or highly circumscribed.

2. Pattern Analysis:

Pattern analysis means that the patient is given a battery of tests with known association to higher cortical functioning; and the neuropsychologist then looks at the pattern of test performance—on which tests did the patient perform relatively poorly, and on which tests did the patient perform well? The classic example of the pattern approach is examination of verbal performance discrepancies on the WAIS. In pattern analysis, the examiner looks for common areas of deficit, noting those areas in which test performance tends to be lower in brain-damaged individuals with specific brain lesions. The problem with pattern analysis approach

is that a person could have a low score on a given test for numerous reasons, and the simple presence of the low score does not necessarily mean a localized problem.

3. Pathognomonic Signs:

A pathognomonic sign is a problem that a patient manifests that is an absolute indication of organic brain disorder. A pathognomonic sign is present the patient is, by definition, suffering from an organic neurological disorder. Examples of pathognomonic signs are visual field deficits, spatial inattention or neglect, apraxia and alexia. There are also a large number of signs that are not pathognomonic, but whose presence strongly implies an organic problem. These specific behavioral deficits include profound difficulty in perceiving numbers written on the tops of the patient's fingers, difficulty in naming certain fingers that are touched while the patient is blind folded, and consistent deficits in the perception of stimuli under condition of bilateral simultaneous stimulation.

The major advantage of the pathognomonic sign approach is that if the sign is present, the patient definitely has organic impairment. The major disadvantage, however, is that absolute pathognomonic signs are seen rather infrequently on neuropsychological evaluation.

4. Right-Left Differences:

To use the right-left difference approach, the clinician examines the test scores of patient on the tasks that require performance or participation of both sides of the body. A number of tests on the Halstead Battery involve having the patient perform a given task with his or her dominant hand and then perform the same task with the non-dominant hand. For example, to give another example on the *Tactual Performance Test*, a right handed patient who takes a significantly longer time for block placement with the left hand than for the right might suggest a lesion in the parietal area of the right hemisphere. One problem with this approach is that measuring right-left differences typically means measuring motor and sensory-motor deficit, so the number of tests in this category is limited.

The level of performance, pattern analysis, right-left differences, and pathognomonic sign approaches to neuropsychological evaluation are the methods most frequently used in clinical practice. Several other approaches have been developed but are not in wide spread use. Brief description of 2 of these approaches follow.

USES OF CLINICAL NEURO-PSYCHOLOGICAL ASSESSMENT:

1. Diagnostic Clarification:

In confusing or complex cases, neuropsychological assessment can be useful for teasing out the relative contributions of neurological conditions (e.g., cellular degeneration, neurochemical disruption), emotional states (e.g., anxiety, depression), and psychiatric illnesses (e.g., personality disorder, psychoses). Neuropsychological assessment can be used to help localize brain damage.

2. Measuring Change:

Repeat assessment can be valuable in charting progress (e.g., recovery from cerebrovascular accident or closed head injury) as well as for recognizing a decline in mental status (e.g., following the course of various dementias, identifying unexpected declines in patients undergoing various treatments or during the process of recovery).

3. Evaluating Cognitive And Functional Status:

Neuropsychological testing is able to delineate an individual's pattern of cognitive strengths and weaknesses relative to his or her own ability as well as compared to normative samples of age-matched peers (Ideally,

norms should be matched for age, education, gender, and race if each variable has been shown to affect test performance).

APPLICATIONS OF NEURO-PSYCHOLOGICAL ASSESSMENT:

1. Vocational Interventions:

With the input of the neuropsychologist, a patient's ability to rejoin the work force can be evaluated and efforts toward re-entry can be facilitated (e.g., develop specific routines that are tailored to the patient's existing strengths and that anticipate the impact of his or her limitations). Aspects of neuropsychological testing can be integrated with organizational psychology in order to enhance the quality of vocational assessment.

2. Academic Interventions:

As with vocational interventions, results of a neuropsychological assessment may be used to plan a special educational program to better meet the needs of an individual. This may be useful with developmental disorders as well as with patients recovering from illness or injury.

3. Family Interventions:

Accurate knowledge about a patient's functional status may assist him or her to adjust their role within a family system. Neuropsychological information may enable family members to recognize the need for changes and accommodations within their relationships, highlight the need for environmental changes to accommodate patient deficits, and provide an opportunity for emotional processing and eventual acceptance of the patient's limitations.

4. Competency Issues:

Neuropsychological status plays an important role in determining a patient's overall competency. Questions typically involve one's ability to exercise rational judgment, make competent decisions, and live in an independent fashion. In addition to cognitive status, assessment of the patient's awareness of their limitations is also important in establishing ability for independent functioning.

METHODS OF NEURO-PSYCHOLOGICAL ASSESSMENT:

1. Medical History:-All relevant medical records, especially results of neurological examination, imaging studies, and electrophysiological (EEG) results.

2. Clinical Interview:-Includes review of cognitive, sensorimotor, and neurovegetative complaints as well as medical, psychiatric, and substance abuse history. Family members may be interviewed when necessary.

3. Behavioral Observations:-Qualitative assessment of mentation, motor function, speech, motivation for optimal test performance, emotion, manner of relating, and humor.

4. Psychometric Tests:-These may be "paper and pencil" tasks or measures requiring performance of a relevant skill (e.g., assembly of blocks or puzzles, reaction time tasks). Major cognitive domains typically assessed include: Attention, Memory, Intelligence, Visual-Spatial-Perceptual functions, Psychosensory and Motor abilities, "Executive" or "Frontal Lobe" functions, and Personality or Emotional Functioning.

INTERPRETATION OF RESULTS:

Deficit patterns occurring across neuropsychological tests can be suggestive of various sites of cerebral dysfunction and neurological processes underlying the deficit pattern. An effort is made by the

neuropsychologist to integrate test data, history, clinical interview, behavioral observations, and available laboratory and radiological evidence into one cohesive summary report that arrives at a neurobehavioral diagnosis, discusses the neurological implications (e.g., localization, course, prognosis), and can be used in the process of treatment planning.

There are a number of ways in which neuropsychologists interpret test data. First, a patient's *level of performance* may be interpreted in the context of normative data. For example, does a patient's score fall significantly below the mean score for the appropriate reference group, suggesting some impairment in this area of functioning?

Second, some calculate difference scores between two tests for a patient; certain level of difference suggests impairment.

Third, ***Pathognomonic analysis*** of scores on tests has been reliably associated with specific neurological injuries or impairments.

Finally, a number of statistical formulas that weight test scores differently may be available for certain diagnostic decisions.

A final point with the interpretation has to do with the desirability of making qualitative evaluations of patient's responses. Many neuropsychologists probably combine the two approaches which need not to be mutually exclusive.

NEURO-DIAGNOSTIC PROCEDURES

The medical field has a variety of neurodiagnostic procedures. they include the tradition neurological examination performed by the neurologist, spinal taps, X rays, electroencephalograms (EEGs), computerized axial tomography (CAT) scans, positron emission tomography (PET) scans, and the more recent nuclear magnetic resonance imaging (NMR or MRI) technique. These are indeed valuable means for locating the presence of damage and disease. But not all of these procedures work equally well in diagnosing impairment.

Finally, some of these procedures pose risks for the patient. Spinal taps can be painful and sometime harmful; we all know about the dangers of too many x rays. In addition to these standard forms of procedures, several other imaging methods are available that provide a better sense of "working" brain. (Lowry, 1997).

Single photon emission computed tomography (SPECT) imaging is based on cerebral blood flow and this provides a "picture" of how the brain is working. As another example, functional MR imaging (MRI) also assesses blood flow changes in the brain. Both of these newer alternative neurodiagnostic procedures hold some promise in clinical neuropsychology because perhaps they are more likely to provide information on how different areas of the brain are working.

Many of these neurodiagnostic procedures are quite expensive, and some are invasive. Therefore, it may be helpful to use neuropsychological tests as screening measures, the results of which may indicate whether more expensive neurodiagnostic tests are indicated.

TESTING AREAS OF COGNITIVE FUNCTIONING:

A. Intellectual Functioning:

A number of techniques have been used over to assess levels of intellectual functioning. To estimate level of intellectual ability, many neuropsychologists use the WAIS -3 and subtests from a modified version of the WAIS-R called the WAIS-R-NI (Kaplan, 1991). The modifications include, for example, changes in administration (such as allowing the patient to continue on a subtest despite consecutive incorrect answers)

and additional subtest items. Because of these modifications, it is believed that the WAIS-R-NI provides more information regarding the patient's cognitive strategies (R.M. Anderson, 1994).

It is not possible to administer the entire WAIS-3, certain individual subtests may be used--most commonly, the Information subtest, Comprehension subtest, and Vocabulary subtest. These subtests are believed to be least affected by the brain trauma or injury and thus it also provides estimates of premorbid intelligence. This is important because often no preinjury test data are available to serve as a baseline against which to compare present functioning.

B. Abstract Reasoning:

For many years, clinicians observed that patients diagnosed with schizophrenia or those deemed cognitively impaired seemed to find it difficult to think in an abstract or conceptual fashion. Such patients seemed to approach tasks in a highly concrete manner. Some of the more commonly used tests to assess abstract reasoning abilities include the Similarities subtest of the WAIS-3 and the Wisconsin Card Sorting Test, or WCST (Heaton, 1981). The Similarities subtest requires the patient to produce a description of how 2 objects are alike. The WCST consists of decks of cards that differ according to the shapes imprinted, the colors of the shapes, and the number of shapes on each card. The patient is asked to place each card under the appropriate stimulus card according to a principle (same color, same shapes, same number of shapes) deduced from the examiner's feedback ('that's right' and 'that's wrong'). At various points during the test, the examiner changes principles; this can only be detected from the examiner's feedback regarding the correctness of the scoring of the next card.

C. Memory:

Brain injury is often marked by memory loss. To test for such loss, Wechsler (1945) developed the Wechsler Memory Scale, or WMS. The Wechsler Memory Scale-3 is the most recent revision of the WMS. The WMS-3 was developed in conjunction with the WAIS-3 (Wechsler, 1997), because clinicians often measure intellectual ability and memory concurrently. WMS-3 subtest scores are combined into 8 primary indexes that assess a range of memory functioning: Auditory Immediate, Visual Immediate, Immediate Memory, Auditory Delayed, Visual Delayed, Auditory Recognition Delayed, General Memory and Working Memory. Four supplementary Auditory Process Composites can also be calculated. These are used to assess memory processes when stimuli are presented auditorily.

D. Visual-Perceptual Processing:

Visual-spatial skills are necessary for a broad range of activities, including reading a map, parallel parking a car, a throwing a baseball from the outfield to a base. In addition to the Rey-Osterrieth Complex Figure Test, many neuropsychologists seeking to assess visual-spatial skills examine performance on certain WAIS-3 subtests, such as the Block Design subtest. Several specialized tests of these skills are also available. For example, the judgment of Line Orientation Test requires examinees to indicate the pair of lines on a response card that 'match' the 2 lines on the stimulus card.

E. Language Functioning:

Various forms of brain injury or trauma can affect either the production or comprehension of language. Tests that require patients to repeat words, phrases, and sentences can assess articulation difficulties and paraphasias (word substitutions); naming tests can help diagnose anomias (impaired naming). Language comprehension can be assessed using the Receptive Speech Scale of the Luria-Nebraska. This subtest requires patients to respond to verbal commands. Speech and language pathologists do an excellent job of comprehensively assessing language dysfunction, and the neuropsychologist may choose to refer patients to these health professionals if a screening test indicates suspected problems in language production or comprehension.

CONCLUSION:

The neuropsychological assessment is a method of examining the brain by studying its behavioral product. As with other psychological assessments, neuropsychological evaluations include the comprehensive study of behavior by means of standardized tests that are sensitive to brain-behavior relationships. In effect, the neuropsychological assessment offers an understanding of the relationship between the structure and function of the nervous system.

Thus the goal of the clinical neuropsychological assessment is to be able to evaluate the full range of basic abilities represented in the brain.

In practice, the neuropsychological assessment is multidimensional (concerned with evaluating different parts aspects of neurofunctioning from basic to complex), reliable and valid.

FORENSIC PSYCHOLOGY

Because clinical psychologists are said to be "experts" in human behavior, it is not surprising that some of them would begin to specialize in the application of psychological knowledge to the problems that face judges, attorneys, police officials, and indeed anyone who must face or deal with issues related to civil, criminal, or administrative justice-victims and violators alike.

This domain of clinical psychology, now called *forensic psychology*, underwent a highly visible growth spurt in the 1970s, and it continues to thrive (Melton, Huss, & Tomkins, 1999). It has gained all the trappings of a significant subspecialty: graduate training programs, professional organizations and boards, an APA division (Division 41-The American Psychology-Law Society), and journals and textbooks. Many of these entities are distinctly interdisciplinary and span the fields of both law and psychology. However, the success and popularity of the field of forensic psychology has also invited some harsh criticism.

Let us begin our description of the field by defining it, briefly tracing its history, and then discussing a few professional matters.

DEFINITION

Forensic psychology involves *"the application of the methods, theories, and concepts of psychology to the legal system"* (Wrightsmann, Nietzel, & Fortune, 1998, p. 499). A variety of settings and clients may be involved, including children as well as adults. All manner of institutions, including corporations, government agencies, universities, hospitals and clinics, and correctional facilities may be involved as clients or objects of testimony.

HISTORY

In 1962, judge Bazelon, writing for the majority on the United States Court of Appeals for the District of Columbia Circuit, held for the first time that psychologists who were appropriately qualified could testify in court as experts on mental disorder (*Jenkins v. United States*, 1962). Finally, the forensic psychologist was about to appear on the scene, even though psychiatrists had enjoyed the privilege of providing expert testimony for many years. Today, psychologists regularly testify as experts in virtually every area of criminal, civil, family, and administrative law. In addition, they serve as consultants to agencies and individuals throughout the legal system.

Of course, the foregoing thumbnail sketch of forensic history from Munsterberg to Bazelon leaves out many details and controversies. Even before Munsterberg, William Stem reported in 1901 that he was studying the "correctness" of recollection—an early precursor of today's research on eyewitness testimony. And even Freud, in a 1906 speech to some Austrian judges, claimed that psychology has real applications to the law. Later, John Watson also asserted that the law and psychology have common interests.

Now, as noted at the outset, forensic psychology has arrived at a point where there are specialists in psycho legal research, interdisciplinary training programs are commonplace, and numerous specialty books are being published. The many journals in this area include *Law and Human Behavior*, *Criminal Justice Journal*, *Law and Psychology Review*, *Criminal Justice and Behavior*, *Behavioral Sciences and the Law*, *American Journal of Forensic Psychology*, and *Psychology, Public Policy, and Law*.

MAJOR ACTIVITIES OF FORENSIC PSYCHOLOGISTS

The growth of forensic psychology has thrust the psychologist into many different roles. We will focus on eight such roles, beginning with the forensic psychologist as expert witness.

1. The Expert Witness

Consider the following scenario:

Ms. Ferris, an employee of the Diego Pan Company, was working at her desk on April 28, 1999. Her supervisor, a Mr. Smith, stopped by her desk. He had a history of telling dirty jokes in her presence, commenting on her physical attributes, and asking about her dating activities. This day, however, he explicitly propositioned her and made it clear that if she wanted to advance in the company, and indeed

even remain employed, she had better agree to have sexual relations with him. She refused. Two weeks later, she was fired. Subsequently, she filed sexual harassment charges against Mr. Smith and also sought damages for emotional suffering.

Dr. Miller, a clinical psychologist, was retained by Ms. Ferris's attorney. He conducted extensive interviews with Ms. Ferris and several of her coworkers. He also administered several tests. Mr. Wright, a coworker, had inadvertently overheard the April 28 conversation between Ms. Ferris and her supervisor and had also previously observed some of the alleged sexual harassment.

During the trial, Mr. Wright served as a witness, testifying to the facts with reference to his own observations. Dr. Miller testified as to his opinions and inferences about emotional damage that were within the scope of his training and experience. This illustrates the basic difference between a lay witness and *an expert witness*. The former may testify only to events witnessed. The latter may offer opinions and inferences. This goes beyond merely stating a conclusion. The expert witness must help the court understand and evaluate evidence or determine a fact about an issue.

Qualification:

An expert witness can be anyone who can provide information that, by its uniqueness in relation to some science, profession, training, or experience, is unlikely to be known to the average juror (Blau, 1998; Wrightsman et al., 1998). Initially, the court will decide whether the expert witness may, in fact, claim expert status. Often, in the case of physicians, psychologists, or psychiatrists, a license is taken as evidence of competence.

But if opposing counsel objects to the witness's claim to be an expert, further evidence will typically be presented regarding competence. Ultimately, it is up to the judge to decide (Blau, 1998). In general, the bases of clinical psychological expertise included:

- (1) education, formal training, and subsequent learning;
- (2) relevant experience, including positions held;
- (3) research and publications;
- (4) knowledge and application of scientific principles and
- (5) use of special tests and measurements is (Maloney, 1985).

What is accepted as evidence will vary from jurisdiction to jurisdiction.

Topics for expert testimony:

Experts are not allowed to state opinions that are the legal prerogative of the jury. Thus, an expert may testify about the manner in which early child abuse might predispose the victim to later be aggressive toward others, but it is up to the jury to decide whether this is true in a particular case. Therefore, expert witnesses are prevented from providing "ultimate opinion" testimony (Wrightsman et al., 1998).

Testifying:

Regardless of the topic, testifying in court can be a harrowing experience for the expert witness. Anxiety and self-doubt are common as the expert is tugged at by attorneys on both sides of the issue. Just as the neuropsychologist rarely gets the easy cases to diagnose, the behavioral expert in court rarely testifies about simple matters. Publicity, sensationalism, and the adversarial legal process are companions not calculated to make the life of the expert witness an easy one.

An important prelude to testifying is pretrial preparation. This can sometimes involve many hours of study, interviewing, testing, and conferences, depending on the case. The expert may be asked to testify by the court or by counsel for either a defendant or a plaintiff.

Cross Examination:

Consider the following two examples that illustrate what cross-examination can be like:

"Good morning, doctor. I see you are here on behalf of an accused killer (or 'your fellow psychologists') again. How are you today?"

"Doctor, were you paid to perform your examination? [Yes] How much? [\$200 an hour.] How many hours did you spend in all? [20 hours.], That's \$4,000, isn't it, doctor? [Yes] And in your opinion the patient was insane on the night of January 26, 1975? (Yes) That's all, doctor."

Other, equally provocative questions that have been asked of psychologists serving as expert witnesses include the following:

"Isn't it true that most of your experiments are done with rats?"

"You are not a real doctor, are you?"

"You can't tell what's going on up here, can you?" (Opposing attorney points to his head.)

Several authors (for example, Blau, 1998; Brodsky, 1991; Schwitzgebel & Schwitzgebel, 1980) provide numerous hints about how the expert witness should behave in the courtroom, even to the point of appropriate dress. Schwitzgebel and Schwitzgebel (1980) summarize their recommended strategies for coping with cross examination as follows:

- Be prepared.
- Be honest.
- Admit weaknesses.
- Talk in personally meaningful terms.
- Listen carefully to the wording of questions. Take time to think.

2. Criminal Cases:

For generations, society has grappled with questions of how best to deal with people who have committed criminal acts but who were so disturbed at the time that it is debatable whether they were personally responsible. Also difficult are decisions as to whether an accused person is really competent to understand the trial proceedings and thus to cooperate in his or her own defense:

The Insanity Plea:

If the accused is judged to have been sane at the time of the alleged crime, then conviction will bring with it imprisonment, fines, or probation. But the individual adjudged insane at the time of the alleged crime will, if convicted, be regarded as not responsible and thereby held for treatment rather than punishment. However, despite popular conceptions to the contrary, the *insanity plea* is seldom successful (Wrightsmann et al., 1998). The defendant is typically assumed to be responsible.

Thus, an insanity plea places the burden of its proof on the accused. In most states and in the District of Columbia, the *burden of proof* is on the defense; the defendant must prove that she or he was insane at the time of the criminal offense (Ogloff, 1991). It should be noted that insanity is a legal term, not a medical, psychiatric, or psychological one. The legal system assumes that people make premeditated and rational choices. Therefore, to behave irrationally is evidence of insanity. But most psychologists would not agree that all normal behavior is rationally chosen. The deterministic view of science creates problems for such a simple notion.

So, then, how is it decided that the accused was insane? Although standards vary from state to state, one of three standards typically prevails. The oldest standard is the *M'Naghten rule*, promulgated in England in 1843. It states that a successful insanity defense must prove that the person committed the unlawful act

while "labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he [sic] was doing; or, if he did know it, that he did not know he was doing what was wrong."

The second standard is the idea of an "irresistible impulse." According to this test, although the person might have known the moral or legal ramifications of the act, it was impossible for the individual to resist the impulse—it was irresistible.

The third standard is that the defendant is not responsible for a criminal act if it was the result of mental disease or defect such that substantial capacity to appreciate the criminality of the act or to conform to the law was lacking. This is the so-called *ALI standard* of the American Law Institute. The ALI standard is viewed as the most liberal or expansive in that criminal responsibility can be excused if mental illness causes a lack of substantial capacity to understand what one is doing (a cognitive deficit) *or* an inability to control one's behavior (a volitional deficit) (Ogloff, 1991).

The famous *Hinckley* case (attempted assassination of President Reagan) changed the judicial scene in the United States. Its first impact was to encourage a return to the M'Naghten rule where cognitive factors rather than volitional ones are paramount. Its second impact is seen in the Supreme Court's ruling that it is constitutional to automatically and indefinitely confine someone who is acquitted of a crime as the result of an insanity plea (Simon & Aaronson, 1988). Third, the verdict "guilty but mentally ill" was introduced into the defense statutes of several states as well as the federal government. Finally, more states began to place the burden of proving the defendant's insanity on the defense, rather than requiring the prosecution to prove the defendant's sanity (Ogloff, 1991).

To conduct an evaluation for criminal insanity, the psychologist must address three questions:

- (1) Does the person have a mental disorder or defect?
- (2) What is the person's present mental status?
- (3) What was the person's mental status at the time of the alleged crime? (Maloney, 1985).

In the process, the psychologist will assess many factors, including the defendant's history and that of the defendant's family, intellectual status, neuropsychological factors, competency to stand trial, reading skills, personality, and measures of taking or malingering.

Competency To Stand Trial:

For this question, the issue is the defendant's state of mind at the time of the trial, not when the offense was allegedly committed. A defendant may have been insane when the crime was committed but later be competent to stand trial. The reverse is also possible. In fact, issues of *competency to stand trial* are raised much more often than the insanity defense. In answering questions of competency, three basic issues commonly come to the fore (Maloney, 1985):

- (1) Can the person appreciate the nature of the charges, and can that person report factually on his or her behavior at the time of the alleged crime?
- (2) Can the person cooperate in a reasonable way with counsel?
- (3) Can the person appreciate the proceedings of the court? In most instances, the evaluation factors noted in the previous paragraph will apply here as well.

3. Civil Cases:

A very large number of civil issues engage the attention of forensic psychologists, running the gamut from trademark litigation to lassa action suits. Two areas that are especially important for clinical psychologists are

- (1) commitment to and release from mental institutions and
- (2) domestic issues such as child custody disputes. Let us focus on these areas as examples of activity in the civil arena.

Commitment To Mental Institutions:

Picture this scenario. Not too long ago, a disheveled man in his late 30s entered a restaurant and began haranguing customers as they approached the cashier to pay their checks. He was incoherent, but it was possible to pick out the obscenities and references to God that peppered his remarks. He did this for about five minutes, whereupon the manager appeared and unceremoniously escorted him to the door. Outside, he continued his tirade while pacing back and forth before the door. He repeatedly accosted customers and tried to make them listen to him. The manager finally called the police. After a brief interrogation, they "helped" him into the patrol car and subsequently deposited him in the emergency ward of the local psychiatric hospital.

This and related scenarios are repeated thousands of times, day after day, across the nation. After an examination (sometimes a rather cursory one), the individual may be involuntarily detained for hours or days, depending on particular state laws. But in a few states, even emergency detentions require judicial consent. Hospitalization that occurs against the will of the individual is referred to as involuntary *commitment*. Some authors, have argued strenuously that involuntary hospitalization is a dangerous and often misused power that has been repeatedly exercised by psychiatrists and others to maintain control over those who will not conform to certain social dictates. The permissible length of involuntary commitment typically varies from one day to three weeks or so, depending on the jurisdiction. After that, a hearing must be held to decide whether detention should continue. In a *voluntary commitment*, the individual agrees to admission and may leave at any time. Some hospitals require patients to sign a form stating that their leaving is against medical advice." Others demand that such patients indicate their intention to leave several days in advance. This enables the hospital to initiate commitment proceedings if the patient is believed to be dangerous to self or others or so disturbed as not to be responsible. It should be noted that "voluntary" admission is often not as voluntary as it might appear at first glance. Most often there is strong pressure from relatives, friends, police, court authorities, or mental health personnel. For the court to commit someone, a hearing must be held to determine whether the person involved meets the criteria laid out by law and whether treatment will be helpful. Most often these criteria refer to a person who (1) is dangerous to self or others, (2) is so disturbed or disabled as to be incapable of making responsible decisions about self-care and hospitalization, or (3) requires treatment or care in a hospital. An additional criterion is that no less restrictive alternative (other than hospitalization) is available or feasible. But above all, the person must be determined to be mentally ill.

4. Domestic Issues:

Many domestic issues these days require intervention by the courts. Child custody, parental fitness, visitation rights, child abuse, juvenile misbehavior, and adoption are but a few of these issues. As an example, we will discuss the issue of child custody. Because divorce has become so prevalent in our society in recent years, it is only natural that problems of child custody have proliferated as well. The fact that marital roles and norms have likewise changed also complicates matters. Increasingly, fathers have assumed child care responsibilities and mothers are now commonly employed outside the home. These and other factors have made custodial questions much more complex than before. Today, the doctrine of the "best interests of the child" always takes precedence in custody disputes.

5. Predicting Dangerousness

We know that therapists have a duty to protect potential victims from their patients' violent behavior. Beyond that, many would agree that, by law or moral imperative, we all have the obligation to protect others from those who are deemed dangerous. But how accurately can psychologists or anyone else actually predict dangerous behavior? The reality is that to truly protect against those individuals who are dangerous, we would have to fish with a very large net—a net that would snare large numbers of individuals who would never actually commit a violent act. After all, the incidence of violence relative to the total population is quite low so low that in order to protect against the truly dangerous, it would be necessary to confine many who are not (Rappaport, 1977).

6. Consultation

Another common activity of forensic psychologists is consultation. Of course, many of the activities discussed previously also involve some manner of consultation. In this section, we focus on several additional aspects of consultation.

Jury Selection:

A consulting psychologist may work with attorneys in the process of *jury selection*. The legal term *voir dire* is used to refer to that part of a trial in which a jury is impaneled. During this phase, attorneys have the opportunity to discover biases in potential jurors; to obtain information for *peremptory challenges* (a set number of challenges allowed each side in a trial to remove jurors thought to be biased against a given side); to ingratiate themselves with jurors or get them to identify with a given side; or to indoctrinate jurors so they will be receptive to an attorney's presentation of the case. All this is designed to give an attorney an edge. The consulting psychologist will work with attorneys to help them in a variety of ways to achieve better *jury* selection or deselection.

Witness Preparation:

It would be unethical for the consultant to work with a witness in any way designed to encourage any alteration in the facts of testimony. Although the line is a very, thin one, the idea of *witness preparation* is to help witnesses present their testimony better, without changing the facts to which their testimony is directed. Because this is such a delicate matter some consultants will not work with witness in criminal proceedings-only in civil cases. Nietzel and Dillehay (1986) have discussed many aspects of witness preparation, including the manner in which facts are presented, associate emotions on the part of the witness, preparation for the sheer experience of being a witness in a courtroom, cross-examination, appearance, and threats by the opposing attorney to the credibility of the witness.

Convincing The Jury:

Finally, consultants can often help attorneys in the way they present their cases and evidence (within the allowable constraints of the judicial system) to jurors. Consultants can assist attorneys in predicting how jurors will respond to certain kinds of evidence or methods of presentation, especially in opening and closing arguments. In effect, the beliefs, feelings, and behavior of jurors are the targets here. The consultants then help attorneys find the very best way to present their cases.

PEDIATRIC AND CHILD PSYCHOLOGY: HISTORY AND PERSPECTIVE

It has been estimated that at least 8 million children in the United States need mental health services. For years, the mental health needs of children and adolescents have not been adequately met. Unfortunately, this trend is likely to continue into the next century. Projections of demographic changes for the United States between 1990 and 2025 suggest that although the overall population growth rate is expected to decline for some groups (such as European Americans), the rates for groups whose mental health needs are currently underserved (such as African American and Hispanic American children and adolescents) are expected to climb dramatically. Two subfields of clinical psychology, pediatric psychology and clinical child psychology are uniquely qualified to address these needs.

Before touching on historical aspects of these child specialties, we should first discuss the distinction between clinical child psychology and pediatric psychology.

DEFINITIONS

The distinctions between pediatric psychologists and clinical child psychologists are somewhat blurred at best. However, in *clinical child psychology*, a common activity over the years has been work with children and adolescents once psychopathological symptoms have developed. This work has often been conducted either in private practice settings or in outpatient clinic settings in the context of the traditional team of psychologist, psychiatrist, and social worker, along with some collaboration with pediatricians.

In contrast, *pediatric psychology* (or child health psychology, as it is often called) has been described as clinical child psychology conducted in medical settings, including hospitals, developmental Clinics, or medical group practice. Pediatric psychologists frequently intervene before psychopathology develops for at least at an earlier stage of the disorder) and their referrals often come from pediatricians. Specifically Roberts Maddux and Wright (1984) have defined pediatric psychology as

“A field of research and practice that has been concerned with a wide variety of topics in the relationship between the psychological and physical well-being of children, including behavioral and emotional concomitants of disease and illness, the role of psychology in pediatric medicine, and the promotion of health and prevention of illness among healthy children”.

Even though the overlap is considerable surveys of pediatric and clinical child psychologists reveal several differences between the two for example, Kaufman, Holden, and Walker. First, pediatric clinicians are characterized by behavioral orientation. With a related tendency to use short-term, immediate intervention strategies. In contrast. Clinical child psychologists are more diverse in their orientations. Second pediatric psychologists tend to place greater emphasis on medical and biological issues in their approaches to training, research and service delivery. Their interests in health psychology and behavioral medicine, as well as their consultations with pediatricians, are distinguishing features. Clinical child specialists tend to place greater emphasis on training in assessment, developmental processes, and family therapy.

Because of the increased relevance of pediatric psychology to clinical psychologists of the twenty-first century, we will focus a fair amount of discussion on this emerging specialty. Before reviewing the major activities of pediatric and clinical child psychologists, however, it is important to survey briefly the history of these specialties and to discuss the developmental perspective adopted by these psychologists.

HISTORY

The history of clinical child psychology goes back to at least 1896, when Witmer stimulated the profession of clinical psychology by starting the first psychological clinic., this clinic was devoted to treating children who were having learning problems or were disruptive in the classroom.

The scientific study of childhood psychopathology can probably be dated to the early 1900s. For a long time, children were not recognized as *being very different from adults in terms of their needs and abilities*. They were pretty much regarded as miniature adults. By the late 1800s and early 1900s, however, several

developments occurred to increase the focus on children. These developments included the identification and care of those with mental retardation, the development of intelligence testing, the formulation of psychoanalysis and behaviorism, the child study movement, and the emergence of child guidance clinics.

Even the classification of childhood disorders has changed greatly, especially in the past 30 years. Both the DSM-I and the DSM-II regarded childhood problems as downward extensions of adult disorders. However, starting with the DSM-III and continuing today with DSM-IV, we now have diagnostic categories specifically relevant to children. Currently, there are 43 specific diagnoses contained in ten groups (American Psychiatric Association, 1994).

The foregoing trends have culminated in what is now referred to as clinical child psychology. Indeed, the field is essentially oriented toward assessment, treatment, and prevention of a variety of problems.

Pediatric psychology evolved as a specialty when it became apparent that neither pediatrics nor clinical child psychology could handle all the problems presented in childhood. Many "well-child" visits to pediatricians require mainly support and counseling rather than medical interventions. Often at issue are matters relevant to all child psychologists, including child rearing, behavioral management problems, or questions about academic performance. When these problems reflect the psychological-behavioral accompaniments of physical illness, handicap, or medical procedures, the pediatric psychologist typically has more relevant expertise than a traditional clinical child psychologist. By 1966, some 300 psychologists were working in pediatric settings in the United States. At about the same time, Wright (1967), recognizing the "marriage" between pediatrics and psychology, called for a new specialty-pediatric psychology. Soon the Society of Pediatric Psychology was formed. This society now has close to 1200 members, and in 1999 became an official division of the American Psychological Association (Division 54).

A DEVELOPMENTAL PERSPECTIVE

Those who work with children and adolescents recognize the importance of a developmental viewpoint. From a developmental perspective, psychological problems in children and adolescents result from some deviation in one or more areas of development (cognitive, biological, physical, emotional, behavioral, and social) when compared with same age peers. At the same time, however, it is important to recognize that

- (1) Development is an active, dynamic process that is, best assessed over time;
- (2) Similar developmental problems may lead to different outcomes (clinical disorders);
- (3) Different developmental problems may lead to the same outcome;
- (4) Developmental processes or failures may interact; and
- (5) Developmental processes and the environment are interdependent--each influences the other such that they cannot be viewed separately, in isolation.

Pediatric and clinical child psychologists; beyond simply viewing children and adolescents as miniature adults. Instead, children and adolescents are assessed and treated within the context of the developmental and environment challenges with which these individuals are faced. The age of children, stage of development across spheres of functioning (cognitive, emotional, social), and their family and social situations must be considered as one tries to conceptualize their problems and prescribe treatment. Indeed, failing to take into account the developmental stage of the child will lead to inaccurate assessments and inappropriate treatments. For example bedwetting is a problem at age 12 but not at age 2. The prognostic implications of a behavior such as temper tantrums will be different for toddlers than for adolescents. These developmental considerations help the pediatric or clinical child psychologist decide whether a problem is indeed present, how severe it is, how to conceptualize it, and what kind of intervention to recommend.

RESILIENCE

Why do some children, even though faced with what seems to be incredible adversity, seem to adapt well with few noticeable problems? The term *resilience* refers to qualities in individuals that are associated with their ability to overcome adversity and achieve good developmental outcomes. Psychologists have become increasingly interested in studying factors that are associated with resiliency, especially among children who are at *risk* for negative outcomes due to unfavorable environments (war, violence in the home)

It is worth emphasizing that these factors have only been shown to be associated with good outcome; they are not necessarily causal. Still, the theme that comes through is that factors promoting strong attachments or bonds between child and parent and those indicating the capacity for good problem-solving skills seem to help buffer the individual against adverse circumstances. As for practical applications, studies of resilience and competence can lead to interventions aimed at preventing or eliminating risk factors, building or improving resources, and enhancing relationships or processes such as self-efficacy and self-regulation.

MAJOR ACTIVITIES

Now we will run to a discussion of the many diverse and still evolving activities in which pediatric and clinical child psychologists are involved. To simplify matters a bit, we will group these activities under the headings of (a) **assessment**, (b) **Intervention**, (c) **prevention**, and (d) **consultation**. First, however, we will consider several general issues relevant to all these types of activities.

GENERAL ISSUES REGARDING MAJOR ACTIVITIES:

Epidemiology. It is important to have some idea of how common various problems are across age groups and other segments of the population. For example between the ages of 1 and 2 years, feeding and sleeping problems are very common. Hyperactivity and conduct disorders occur more frequently in boys than in girls. Even behaviors that might seem to indicate the presence of a mental disorder occur commonly in non clinical groups. To properly understand and diagnose, the field must have information on how behaviors change over time, how they covary with one another, and how behaviors are distributed throughout the community?

The Situation. Behavior is often situation-specific. A child may be quiet and withdrawn at home but not with peers. Another child may be compliant with authority figures but hostile with other children. This is not to say that general dispositional factors are unimportant. Rather, to adequately conceptualize a child's problem (or presumed problem), those who work with the child must pay attention to the interaction between factors in the child's environment and generalized personality characteristics.

Who Is the Client? It is sometimes difficult to determine exactly who in the group the real patient is. In many instances, the most effective treatment is directed at the parents, because they are largely in control of the child. Furthermore, children do not refer themselves for assessment or therapy. They are referred by parents, physicians, teachers, or even court authorities. As Campbell (1989), puts it,

"The first task of the clinician working with children and families is to determine whether 3 problems actually exist. Intolerance, ignorance, and misconceptions on the part of adults often lead to referral".

Diagnosis and Classification of Problems. The classification of childhood disorders has been of more interest to clinical child specialists than to pediatric psychologists because the former have historically had to deal more often with psychiatric cases. The DSM-IV incorporates the growing interest in childhood disorders. There are ten major groups of disorders that are usually first diagnosed in infancy, childhood, or adolescence. Often, diagnostic criteria or thresholds are modified so that then is more appropriate for children or adolescents. For example to obtain a dysthymic disorder diagnosis, a child or adolescent can present with an irritable (versus depressed) mood, and the duration of all symptoms can be only one year (versus two years for adults). *Conduct disorder* is one of the most frequently encountered diagnoses in inpatient and outpatient settings that treat children and adolescents. Further, a number of assessment and treatment approaches have been developed to address the behavior problems that comprise this disorder.

Often, psychological problems experienced by children and adolescents are subdivided into internalizing disorders and externalizing disorders.

Internalizing disorders are characterized by symptoms of anxiety, depression, shyness, and social withdrawal. Examples of internalizing disorders are mood disorders (such as major depressive disorder) and anxiety disorders (such as separation anxiety disorder).

Externalizing disorders are characterized by aggressive behaviors, impulsive behaviors, and conduct problems. Examples of externalizing disorders are conduct disorder and attention deficit/ hyperactivity disorder. Variety of assessment methods and techniques-including interviews, behavioral observations, questionnaires and checklists, intelligence and achievement tests, and neuropsychological tests-can be used to identify these types of problems in children and adolescents.

A. Assessment

Assessment with children and adolescents differs in several important ways from that with adults. In contrast to adults, children and adolescents rarely seek out treatment on their own. Further, with children and adolescents, it is almost always necessary to seek information from other people besides the child: parents, teachers, social workers, school psychologists, physicians, and others. Although parental consent is required, it is also important to obtain the child's permission to seek information from these other sources. This will help a great deal in building an atmosphere of trust and respect. Finally, children and adolescents know less about the roles of mental health professionals and thus may harbor resistance or even fear.

The issue of multiple sources of information in child and adolescent assessment warrants further comment. It should be recognized that these multiple sources of information may not always agree with one another. For example, some have suggested that depressed mothers tend to exaggerate the nature and severity of a child's problems compared to other informants. Although more recent evidence has challenged this claim, there is currently no consensus as to how a clinician or researcher should integrate discrepant diagnostic information. This problem is compounded in the area of clinical child psychology, where multiple sources of data are tapped routinely. Fortunately, researchers are now beginning to investigate how best to integrate assessment data from multiple informants.

When assessing children or adolescents, it is very important to estimate the nature and severity of the problem early on. The complaint may be as specific as vomiting or fear of walking to school, or as general as a "depression" or lack of interest in schoolwork. The examiner will want to learn why help is being sought, how long the problem has existed, and what other steps have been taken to resolve the problem. From all the sources available, a case history will then be generated in order to gain an understanding of exactly how the problem has developed. Again, all this is done to determine the nature of the problem and how best to deal with it.

For most problems, a comprehensive assessment will generally include information from multiple informants (self, parent, peer, teacher) and from multiple assessment methods (self-report scales, behavior checklists, interviews, intelligence or ability tests). In the sections that follow, we will present several issues associated with some of the most common methods of assessment used by clinical child and pediatric psychologists.

Interviewing:

Clinical child and pediatric psychologists interview parents to

- (1) Elicit information about behavior, events, and situations;
- (2) Gauge parental feelings and emotions; and
- (3) Establish the basis for subsequent therapeutic relationships.

Interviews with children and adolescents allow them to "tell their own story." The psychologist asks questions aimed at the individual's perception of self, perception of others, and perception of the existence and nature of the problem.

When interviewing children, it is important to remember that they have not always been told why help is being sought, or they may understand only imperfectly what they have been told. Just being in a clinic without understanding why, or without having been allowed to decide on treatment for them, can be very anxiety provoking for children (or anyone else). Therefore, it is important to find out how the child feels and what the child understands as the real purpose for the visit. As much as possible, the clinician must set a reassuring tone for the interview and then, within the limits of the child's understanding, explain what will take place. In some cases, for example, it may be necessary to stress that the child will be going home after the visit to the clinic or that the specific diagnostic procedures will not hurt.

It can be very difficult to interview children. They cannot always communicate their feelings and thoughts in any precise way. Equally important, children can be highly suggestible or fearful. Consequently, they may tell the examiner what they think he or she wants to hear or what others have told them. They may be

so intimidated or nervous that they get their stories mixed up. The length of an interview with a child may depend on factors such as age or intellectual level.

Behavioral Observation:

Whenever possible, direct observations of the child at home and school should be undertaken. A variety of observational methods are available. For example, there are naturalistic, analogue, participant, and self-observational techniques for use with children, and a variety of coding systems are available for rating behavior. As is true with all behavioral observations, child and pediatric psychologists need to keep in mind issues such as reliability of observations, reactivity to observation, and the validity of the observational data. We know various observational methods and systems used in the assessment of children and adolescents.

One of these is the Behavioral Coding System (BCS) developed and used by Patterson (1971) and colleagues (Jones, Reid & Patterson, 1975; Patterson & Forgatch, 1995). The BCS was designed for use in the homes of pre delinquent boys with aggression and noncompliance problems. Trained observers spend one to two, hours in the home observing and recording family interactions, using the BCS coding system.

Intelligence Tests:

When questions of intellectual achievement, academic deficits, or the development of an educational plan for the child are involved, intelligence tests are often used. The most frequently used tests are the Wechsler Intelligence Scale for Children, Third Edition (WISC-III), the Kaufman Assessment Battery for Children (K-ABC), the Wechsler Preschool and Primary Scale of Intelligence-Revised (WPPSI-R), the Stanford-Binet Intelligence Scale, Fourth Edition, and the Peabody Picture Vocabulary Test Revised. These and other measures are well suited for test batteries assessing learning disabilities, mental retardation, neurological dysfunction, or pervasive developmental disorders in children.

Achievement Tests:

These tests are used to assess past learning particularly that associated with training or school programs. They can address a variety of different academic subjects, from reading to arithmetic. Three widely used screening devices are the Peabody Individual Achievement Test-Revised, the Woodcock Johnson Psycho educational Battery, and the Wide Range Achievement Test-3 (WRAT-3).

Projective Tests:

Although the use of projective tests with children is somewhat controversial, some clinicians argue that they can be useful when a more dynamic picture of personality is required. One argument for the use of projective techniques in the assessment of children and adolescents is that the ambiguity of the stimuli in these tests or their use of animals as subject matter may be less threatening for those youngsters whose anxiety level is high. Both the TAT and the Rorschach are often used, as well as the Children's Apperception Test, Incomplete Sentences Blank, and Draw-A-Person Test. Clinicians who use projective techniques must consider the reliability and validity of their interpretations and guard against falling prey to interpretive errors based on illusory correlations.

Neuropsychological Assessment:

Recent growth of child neuropsychology as a specialty can be attributed to an increased focus on neurodevelopment disorders following passage of the Education for All Handicapped Children Act (Public Law 94-142, Federal Register, 1976), as well as advances in medical care that have decreased mortality from devastating diseases but increased the need for comprehensive assessment of their neurological effects on surviving children. Current research areas for child neuropsychologists include assessing the neurophysiologic correlates of conduct disorder of inattention/over activity, aggression/defiance, of anxiety.

Family Assessment:

To a large extent, children's problems are embedded in the overall family context. The child is shaped by the family, and the family in turn is shaped by the child. Therefore, to understand the child's problems and intervene appropriately, one must also understand the family system. A variety of assessment devices exist for this purpose. Several commonly used measures of family functioning are the Family Environment Scale, or FES (Moos & Moos, 1981); the Family Adaptability and Cohesion Evaluation Scales, or FACES III (Olson, Portner, & Lavee, 1985); and the Family Assessment Measure, or FAM (Skinner, Steinhauer, & Santa-Barbara, 1983).

These assessments provide useful information regarding the issues at hand, and can be used separately as well as in conjunction.

INTERVENTIONS & TRAINING IN PEDIATRIC AND CLINICAL CHILD PSYCHOLOGY

INTERVENTIONS

In the case of children, the intervention approaches are equally diverse and generally similar to those used with adults. However, "child therapy is also different, for at least two reasons already noted. Children do not typically refer themselves for treatment, nor do they possess the same capacity for introspection and self-report as do most adults. Kazdin (1988) has conservatively estimated that more than 230 therapeutic techniques are used in treating children or adolescents. If anything, this number has grown. The majority of these treatments have not been subjected to empirical investigation regarding their efficacy and effectiveness (Kazdin & Weisz, 1998).

PSYCHOANALYTICALLY ORIENTED THERAPY

Although psychoanalytically oriented treatments are frequently used in the treatment of children and adolescents, modification of traditional techniques is often necessary. Children are unlikely to understand or be able to adhere to the strict requirements of an orthodox analysis in the same way that adults can. They usually cannot deal with the highly verbal, abstract, and introspective nature of the process. Children who have particularly weak egos or are living in extremely threatening home situations with unsupportive parents are not often good candidates for psychoanalytic procedures.

Modified psychoanalytic approaches, however have been widely applied to children. Although Anna Freud (1946b) believed that children in therapy must achieve insight into their troubled feelings and defenses, other less traditional analysts have proceeded differently. The frequency of meetings is usually reduced to once or twice per week.

The approach is more symptom-oriented and is designed to teach the child that certain behaviors are really defenses against anxiety. All of this may help the child to negotiate a certain developmental stage rather than "cure" a fixation, for example. In general, the differences in approaches are in degree rather than kind. For example, daydreams rather than nocturnal dreams might be solicited. In a greater departure, play rather than direct verbalization may be used as a communication vehicle.

PLAY THERAPY

Rather than use dreams or free associations, some therapists have chosen to study the psychic life of the child through play-either of a free or a structured variety. The child is brought to a playroom containing a variety of materials such as a sandbox, clay, puppets, dolls, and toys of all kinds. How children play, what objects they choose, and the nature of their verbalizations as they play can all be revealing, cathartic, and therapeutic. Sometimes the therapist enters into the play and makes comments and suggestions or otherwise guides the child toward certain conflict or problem areas. The nature of children's play may convey how they relate to significant other figures in their lives, how they handle their anxieties, and so on. In essence, play becomes a substitute for verbalization.

An example of play therapy is **Solomon's** (1955) approach. He brings the child into a room with a table on which has been placed a number of dolls. He selects one and then asks the child what to do with it. Sometimes the dolls are arrayed to represent the child's family. As the child arranges the dolls and plays, the therapist interprets what the child is doing, which then facilitates the expression of feelings on the part of the child. Concrete family experiences, wishes, and even unconscious urges may be expressed in the process. In general, however, play therapy has evolved into a rather eclectic, amorphous set of techniques and procedures.

Play therapy is no longer associated solely with a psychodynamic orientation, but has also been used with a cognitive-behavioral approach. Although children may not be able to process the verbal subtleties that characterize cognitive therapy for adults, Knell (1998) argues that cognitive-behavioral play therapy can effect cognitive and behavioral changes in children through techniques such as modeling adaptive coping skills, indirectly communicating cognitive change through play and providing opportunities (again through play) for the child to reenact problem situations and gain some mastery over them.

BEHAVIOR THERAPY

Behavioral techniques have overtaken psychodynamic methods as the treatment of choice to childhood problems. For children, it has always seemed evident that their problems are the direct outgrowth of environmental factors or the people who are in control of various aspects of the child's life. Either respondent principles (behavior is acquired through classical conditioning) or operant principles (behavior is maintained by its consequences) seem ideally suited to account for main childhood behaviors. Moreover, these principle can easily be applied by parents and teachers a part of the therapeutic plan.

Most of these procedures whether systematic desensitization aversion therapy, or contingency management techniques, is highly efficient in comparison to older, more traditional psychodynamic methods. Changes that once took months or even years to occur can be achieved in 20 or fewer sessions. Parents and teachers can be trained to enhance the effectiveness of the techniques and to help ensure that changes will generalize outside the therapist's office. *Parent management training* involves a set of therapeutic procedures that are designed to "train" parents to modify a child or adolescent's behavior at home. Parents master basic learning principles (contingency management, reinforcement) and then implement them at home. Enlisting parents in the treatment process makes it more likely that behavior change will be effected in the child or adolescent. For example, Barkley (1987) has developed a program for teaching child management skills to parents of children who are defiant and noncompliant.

BEHAVIORAL PEDIATRICS

Clinical child psychologists and pediatric psychologists can also contribute a great deal to the management of children during their stay in the hospital. This includes help in preparing children for particular medical procedures and in assisting the child and family in coping later with their medical problems. Techniques used here range from behavioral rehearsal and stress inoculation to various methods of cognitive reappraisal. Whether the problem is a simple fear of needles or the stress and pain associated with repeated changing of bandages for burn patients, behavioral methods can be helpful. The management of pain and headaches and ensuring compliance with medical regimens are also important provinces of *behavioral pediatrics*.

COGNITIVE-BEHAVIORAL THERAPY

In recent years, cognitive-behavioral therapy has increasingly been applied to problems such as impulsivity, hyperactivity, anxiety, depression, and conduct disorders. The basic idea is to improve problem solving and enhance planning and delay of gratification. Through internal assessments and self-statements children are taught to bring their previously distressing or problematic behavior under rational control. The vehicle through which this is accomplished is the alteration or cognitions, and the ultimate goal is the creation of a new, more adaptive "coping template".

GROUP AND FAMILY THERAPY

Many of the problems are learned and even nourished in the family setting; to relieve them often requires the cooperation and understanding of the family unit. Because children are so much influenced by and is the product of their families. In some, cases it only makes good sense to treat the entire family. However, the relatively modest evidence for the overall efficacy of family therapy suggests that family therapy might be used selectively in those cases or disorders in which there is evidence supporting its effectiveness. For

example recent reviews suggest that certain forms of family therapy effectively treat anxiety disorders and conduct disorders in children and adolescents.

As for group therapy, a recent meta-analysis indicated that overall group treatments for children and adolescents were more effective than wait-list and placebo control groups. The overall effect size across treatments averaged .61, indicating that, on average, a child or adolescent who received one of these treatments was better off than 73% of those in the control groups. Although the small number of studies sampled by Hoag and Burlingame (1997) precluded adequate tests of the efficacy of different types of group treatment and different types of clinical problems addressed, it seems likely that some forms of group treatment for specific clinical problems (for example, cognitive-behavioral group treatment for depression) are more effective.

PSYCHOPHARMACOLOGICAL TREATMENT

Medications may be used as adjuncts to psychotherapy in the treatment of the child. The medication most frequently used is those that treat attention deficit/hyperactivity disorder, or ADHE. The most frequently prescribed medication for ADHD is the psycho stimulant methylphenidate. Although studies have demonstrated the positive effects of Ritalin in treating ADHD symptoms not all children and adolescents have a positive response. The costs, in the form of side effects, may outweigh the benefits and there have been few demonstrations of long-term benefit in the form of improved prognosis. These same points apply to other forms of medication that are used to treat the range of clinical problem presented by children and adolescents.

The research literature suggests that, in general, psychological treatments for childhood and adolescent problems are effective. Further, recent reviews have identified specific interventions for specific child and adolescent problems that have empirical support.

PREVENTION

Clinical child and pediatric psychologists have been especially concerned about the prevention of childhood problems. Of course, prevention and treatment are activities that blend and merge. Primary prevention is defined as counteracting problems before they have a chance to develop, and secondary prevention involves the prompt treatment of problems in order to minimize their impact. Certainly, the clinical child or pediatric psychologist wants to either prevent problems before they occur or at least identify the problems before they get out of control. In any case, the stance of either the pediatric or clinical child psychologist is a proactive one.

In the context of pediatric practice, Roberts (1986) likes to use the term *anticipatory guidance*-the use of counseling and education in advance of difficulties. For example, parents may be counseled about "childproofing" their home at various stages of the child's development. This could cover almost anything from covering electrical outlets to blocking off stairways. At a more psychological level, it may involve providing information on preparing the child for the birth of a sibling or the death of a grandparent. In the case of a child with cystic fibrosis, it might take the form of counseling the youngster on how to respond to teasing from peers prompted by the physical limitations imposed by the disease.

One of the tenets of community psychology has always been the identification of people at risk for the development of subsequent problems. One example is the child who is hospitalized. Programs have been designed to provide information to hospitalized children, to encourage emotional expression in such children, to offer them coping strategies, of to just help build trusting relationships. In addition, numerous films and videotapes also have been developed to help children cope with medical interventions.

To aid in the prevention of physical problems, safety programs directed toward children have addressed issues that range from crossing the street safely to avoiding abduction or molestation. Programs to train so-called latchkey children have also been developed. Research suggests that specific recommendations and pediatric counseling with parents will increase the use of safety car seats. More recently attempts have been

made to integrate child injury and child abuse/neglect research because similar interventions may be used to prevent harm in both domains

Only pediatric psychologists (and not clinical child psychologists) concern themselves with prevention, prevention is not the sole province of pediatric psychologists; clinical child psychologists are becoming increasingly more involved as well. Examples of prevention programs outside of medical settings include an early intervention and prevention program to reduce anxiety disorders in 7 to 14-year-olds who were at risk for these problems and the Children of Divorce Intervention Program aimed at improving the adjustment of children and adolescents to divorce.

CONSULTATION Consultation-liaison relationships have long been typical in the professional lives of pediatric psychologists. Drotar (1995) and Roberts (1986) have described the consultation process at some length, although the focus here will be on the pediatric psychologist, many points apply equally to clinical child psychologists.

Because of the problems presented in pediatric settings, consultation has become an integral part of the psychologist's role. Consultation occurs with parents, pediatricians, medical school systems, welfare agencies, juvenile systems, and other health or service agencies. The subjects of consultation may range from psychiatric, psychosomatic, or developmental problems to any kind of illness-related difficulties common to health care settings. In particular pediatric psychologists consult with pediatricians who call upon the psychologist much as they might consult with other specialists such as cardiologists or oncologists. Because pediatricians encounter such a wide range of both well and ill children often face problems for which they have training, knowledge, or interest in treating. Hence, they may turn to the psychologist.

Consultation may occur in hospital practice or in outpatient settings. It may involve requests or immediate and very brief help or for term interventions. Requests may come in the form of hallway chats and quick telephone, or in the shape of case workups and written reports. Some interventions are directly with child; others involve work with the family with the pediatrician's staff. Indeed, several **models of consultation** have been offered. Let us consider now.

Independent Functions Model.

Here, the psychologist functions as a specialist and independently carries out diagnostic and treatment activities on patients referred by the pediatrician for other professional. On the surface seems relatively non collaborative. However formation is exchanged between parties before and after the patient is seen. This model several advantages. Medical professionals, such as pediatricians, find it familiar and comfortable. Further, the model is efficient and cost effective. However, the limited contact may lead to less comprehensive consult, and fewer training opportunities.

Indirect Consultation Model. In this case, the pediatrician retains chief responsibility for patient management. The psychologist has, at best, limited contact with the actual patient and makes a contribution through analysis of information provided by the pediatrician for other specialist). This kind of consultation is especially characteristic of medical center settings where teaching is a major function. Often the role of the psychologist is an educational or supervisory one, especially when pediatric residents are involved. This kind of consultation may involve

- 1) Brief contacts, such as phone calls or informal hallway consultations);
- (2) Presentation of information seminars, conferences, Workshops, or in-service training-for other professionals; or
- 3) Situations where another professional carries out specific behavioral or psychosocial interventions recommended by the psychologist. For example, the psychologist may develop specific guidelines and give them to the pediatrician, who either implements them or else supervises parents who do the actual intervention. These guidelines may involve how to handle problems such as temper tantrums, bedwetting,

mealtime problems, or general behavioral management. Roberts (1986) has provided a list of sample guidelines or protocols for the assessment and treatment of childhood problems.

As noted by Drotar (1995), indirect consultation is more likely to be well received and effective if the focus is on clinical relevance and if there are practical applications that follow. However, there are some limitations and drawbacks as well (Drotar, 1995). This model can be very time consuming and may be seen as a detractor from time spent on direct clinical service. Further, pediatricians and other medical personnel often want immediate solutions, to which complex clinical problems do not always lend themselves.

Collaborative Team Model. A third model represents what most consider true collaboration. Here, pediatrician, psychologist, nurse, or others work together and share the responsibility and decision making. This might be referred to as "conjoint case management." In this instance, the professionals involved act as functional equals. Of course, such a model is not often possible in non-teaching / non-research settings for several practical and financial reasons.

However, such a model is especially appropriate for those cases that clearly involve both medical and psychological features. Effective collaborative team consultation evolves over time among those who have worked closely together, who respect each other's viewpoint, and who offer expertise that complements what other team members possess (Drotar, 1995). The biggest challenge is for team members to learn from each other, develop new professional skills, and maintain their own professional identities (Drotar, 1995).

Training

Issues of training in both clinical child and pediatric psychology have come to the forefront in recent years. This is due in part to the growing interest in health and medical issues and in the developing collaboration between medicine and psychology.

Roberts et al. (1998) recently presented a training model for psychologists who will provide services for children and adolescents. These recommendations apply to those seeking to become either clinical child psychologists or pediatric psychologists, although in both cases some additional specialized training might be required. Roberts et al. (1998) listed their recommendations by topic area.

1. ***Life span developmental psychology:*** Trainees should obtain knowledge and expertise in developmental processes (social, cognitive, emotional, behavioral, and physical) and how these processes may influence assessment, diagnosis, treatment, and outcome.
2. ***Life span developmental psychopathology:*** Trainees must be exposed to information about mental, emotional, and developmental disorders and abnormal development.
3. ***Child, adolescent, and family assessment methods:*** Trainees should learn to administer and interpret assessments (intellectual, personality, behavioral, family, socio-cultural context) commonly used with children and adolescents. Trainees should focus on assessments with empirical support and appreciate how assessments can be influenced by ethnic or cultural background, or disability.
4. ***Intervention strategies:*** Trainees should be exposed to leading child, adolescent, parent, family, and school and community interventions, as well as the research literature on their effectiveness.
5. ***Research methods and systems evaluations:*** Trainees should be familiar with research methods so that critical evaluations of assessments, treatments, and services are possible. Further, trainees should be able to conduct research on important topics.
6. ***Professional, ethical, and legal issues:*** Trainees must be familiar with issues that pertain to children, adolescents, and families. These issues include child abuse reporting, custody, confidentiality, duty to protect, and relevant state and federal laws.

7. **Issues of diversity:** Trainees must appreciate the role of ethnicity and culture and how diverse beliefs and expectations affect assessment, intervention, and the interaction between service delivery systems and children or adolescents and their families.

8. **Multiple disciplines and service delivery systems:** Services for children and adolescents have become more interdisciplinary in nature and involve different service delivery systems. Trainees should be exposed to other disciplines (pediatrics and family practice, social work) and how professionals from these disciplines seek to address problems.

9. **Prevention, Family support and health promotion:** Trainees should have expertise in other forms of intervention that improve quality of life and can help prevent future problems.

10. **Social issues affecting children, adolescents, and Families:** number of social circumstances (natural disasters, abuse and neglect, violence) can greatly impact the well-being of children, adolescents, and their families. Trainees should have knowledge and appreciation of these potential adversities.

11. **Specialized experience in assessment, intervention, and consultation:** Trainees should acquire a broad range of applied experiences with a diverse selection of children, adolescents, and their families. This means working in several different settings (such as medical hospitals, public-sector mental health agencies).

Roberts et al. (1998) believe that training in these areas should occur through didactic coursework, observation in an applied or research setting, and supervised service delivery. These experiences can be obtained at the pre-doctoral, internship, and postdoctoral phases of training.

Regarding specialized training in pediatric psychology, Drotar (1998) notes that the needs of pediatric psychology trainees are complex. At a minimum, pediatric psychologists must learn to consult and collaborate with physicians, to recognize and manage the clinical problems that are typically encountered in pediatric settings, to teach primary care providers about principles of behavior and development, and to engage in interdisciplinary research. These training goals may be attained through didactic coursework, observation of pediatric psychologists in these situations, and hands-on experience in the field.