

CHAPTER ONE

1.1 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..

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.

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”.

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 attention problem that might contribute to poor school performance.. 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.

1.2 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.

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.

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 caused by forces of evil. 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 everyone 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.

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.

1.3 THE SKILLS & ACTIVITIES OF A CLINICAL PSYCHOLOGIST

The fundamental skill areas that is 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 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.

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.

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.

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.

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.

1.4 CLINICAL PSYCHOLOGY EMPLOYMENT SETTINGS

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

- Ψ General Hospitals and Medical Clinics;
- Ψ Mental Health Clinics and Psychiatric Hospitals; Rehabilitation Hospitals and Clinics;
- Ψ Community Service Agencies;
- Ψ Private Practice;
- Ψ Schools, Universities and Colleges;
- Ψ Industry and the military
- Ψ Prisons and Correctional Facilities;
- Ψ Private and Government Research Agencies; and

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.

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.

1.5 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.

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 psychiatrists 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.

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. 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 work as consultants for business and industry.

6. 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.

7. PARA-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.

1.6 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.

CHAPTER TWO

2.1 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.

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.

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.

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.

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.

CAUSES OF MENTAL ILLNESS 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. More recently, research has uncovered an infectious etiology to one form of obsessive-compulsive disorder, as explained below.

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 AND 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 border-line 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.

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 Clinical 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.

CHAPTER THREE

MAJOR THEORITICAL MODELS IN CLINICAL PSYCHOLOGY

The field of clinical psychology in the contemporary era has been founded on four predominant theoretical models or orientations to the understanding and treatment of human difficulties. Theoretical models can be understood as worldviews or philosophies about human behavior that provide a conceptual framework for research, assessment, and treatment of psychological problems. These four psychological orientations include the psychodynamic, cognitive-behavioral, humanistic, and family systems models and each have received substantial research and clinical support.

1. The Psychodynamic Approach

The **psychodynamic** approach began with the work of Sigmund Freud. Often people assume that those who utilize the psychodynamic approach are Freudian and that they most likely look and act like Freud. People frequently picture a psychodynamic psychologist as a middle-aged or elderly man with a beard, sporting a tweed jacket replete with a pipe. They often envision someone who will analyze everything and require that their patients lay on a couch, talk about their relationship with their mother, and disclose all of their sexual fantasies. Various films and other media influences have perpetuated this stereotype of the psychodynamic therapist.

This narrow stereotype of psychodynamically oriented professionals is obviously outdated and inaccurate. Psychologists of all ages, ethnicities, and both genders identify themselves as being psychodynamically oriented. While Freud is usually credited with being the founding father of the psychodynamic perspective, many neo-Freudians and other revisionists have greatly adapted, broadened, and challenged Freud's basic approach over the past 100 years. Freud, if alive today,

might even be surprised (or appalled) to behold the array of current theories and intervention strategies utilized by modern psychodynamic psychologists’.

The psychodynamic perspective assumptions about human behavior and psychological problems

First, the psychodynamic perspective holds that human behavior is influenced by *intrapsychic* (within the mind) drives, motives, conflicts, and impulses, which are primarily unconscious.

Second-various adaptive and maladaptive ego defense mechanisms are used to deal with unresolved conflicts, needs, wishes, and fantasies that contribute to both normal and abnormal behavior.

Third-early experiences and relationships, such as the relationship between children and their parents, play a critical and enduring role in psychological development and adult behavior.

Fourth-insight into these mostly unconscious influences combined with working through them (discussing and integrating them into everyday life) help to improve psychological functioning and behavior. Finally, the analysis of the transference relationship that develops between the patient and therapist also helps to resolve conflicts and improve psychological functioning and behavior.

Transference involves the projection of early relationship dynamics onto the therapist who represents an authority figure similar to the patient’s parents, for example.

Countertransference involves projection by the therapist onto the patient in response to the patient’s transference behavior.

The psychodynamic approach can be generally classified into several categories including

Ψ the traditional Freudian perspective,

Ψ the revisionist perspective, and the modern

Ψ object relations perspective

Freud’s Psychoanalytic Perspective: Freud’s psychoanalytic perspective is often called classical analysis or classical Freudian analysis. Freud developed an understanding of human behavior based on three mental structures that are usually in conflict. The **id**, developed at birth, operates on the pleasure principle and represents all of our primitive wishes, needs, and desires. The **ego**, developed at about age one, operates on the reality principle and represents the rational and reasonable aspects of our personality helping us to adapt to a challenging world. Finally, the **superego**, developed at about age 5 following the successful resolution of the Oedipus complex, represents the internalization of familial, cultural, and societal norms and mores. The superego includes the *ego ideal* (the perfect image or representation of who we are and who we can become) and our *conscience* (the rules of good and bad feelings, thinking, and behavior). The conscience

involves what we perceive to be “right” and “wrong.” Inevitable conflict between the id, ego, and superego lead to anxiety and discomfort and the need to utilize ego defense mechanisms.

Defense mechanisms are strategies developed by the ego to protect the person from these internal and mostly unconscious conflicts. Thus, they help us cope, either adaptively or maladaptively, with the inevitable anxiety and discomfort associated with being human. There are a variety of ego defense mechanisms individuals can draw upon.

Freud also outlined several **psychosexual stages** of development that he regarded as universal. These include the *oral, anal, phallic, latency, and genital* phases. *Libidinal*, or life energies, are channeled toward different areas of the body that demand gratification during each of these phases. Potential conflicts and problems can develop as a byproduct of fixations at any one of these stages. For example, one might become fixated at one stage of development (e.g., oral) due to too much or too little stimulation during that stage. This fixation may then result in problems in adulthood such as smoking, eating, or drinking too much.

Goals of Freudian psychodynamics approach

Ψ **insight-** (understanding the unconscious factors that lead to problematic feelings, thinking, and behavior)

Ψ **working through** of the insights to improve daily functioning. The working through process involves a careful and in-depth examination of the role of unconscious wishes, drives, impulses, and conflicts in everyday life. Understanding and analyzing inevitable defensiveness and resistance to treatment.

Techniques

Ψ **free association-**(saying whatever is on one’s mind without censoring),

Ψ *dream analysis and interpretation,*

Ψ the *analysis of transference* as well as everyday thoughts, feelings, and behavior were used to help understand and treat various problems.

THE REVISIONIST OR NEO-FREUDIAN PERSPECTIVE: The psychodynamic perspective proposed by Freud has been expanded and adapted in various ways by numerous theorists since the days of Freud. These revisions actually began during Freud’s lifetime.

Carl Jung (1875–1965) was one of the first members of Freud’s inner circle to disagree with fundamental aspects of Freud’s theory and develop a revision of the psychodynamic perspective. In fact, Freud had hoped that Jung would be his protégé; and heir, carrying on his work after his death.

Freud's disappointment with Jung's iconoclasm led to a great deal of bitterness and many angry letters between the two men.

Most adaptations of Freud's original theories focus on the role of development beyond childhood, the role of societal and cultural influences, and the role of interpersonal relationships, and involve a de-emphasis on unconscious and id-driven impulses and behaviors such as sexuality.

Erik Erikson (1909-1993), for example, developed a lifespan perspective stating that psychosocial development continues far beyond the five psychosexual stages of childhood outlined by Freud.

Alfred Adler (1870-1937) felt that Freud's emphasis on the id and sexuality as well as his under-emphasis of the ego were critical flaws in his approach. Furthermore, unlike Freud, Adler felt that compensation for feelings of inferiority were very important in the formation of personality and psychological functioning. **Carl Jung** also rejected Freud's emphasis on sexuality. Furthermore, Jung emphasized spiritual influences as well as the role of the collective unconscious (symbols and innate ideas that are shared with our ancestors). **Harry Stack Sullivan (1892-1949)** focused on the role of interpersonal relationships in personality and psychological development. **Karen Horney (1885-1952)** took issue with Freud's theories of penis envy and the role of women.

The contributions of these neo-Freudians, or revisionists,

✓ significantly diverged from Freud's original theories. Fundamentally, Freud's emphasis on the id was de-emphasized among the revisionists who developed theories that focused more on the functioning of the ego. Thus, the theories of many of the revisionists have become known as forming the basis of *ego psychology*.

✓ most of the revisionists agreed that the role of interpersonal relationships was fundamental in the development of personality and psychological functioning. Finally, the revisionists generally agreed that psychological development continues beyond the early years addressed by Freud. These aspects of the revisionists' theories set the stage for current object relations theory.

THE OBJECT RELATIONS PERSPECTIVE: Even though Freud's psychoanalytic theory focused heavily on early childhood experiences, he never once treated a child in psychoanalysis. Freud made inferences about childhood development and experiences through his analysis of adult patients who reflected on their childhoods. Critics of Freud often state that because his theories were based on his experience of treating a small number of upper-class and primarily adult female patients in Vienna during the Victorian period rather than on more broad and scientifically based research and experience, his theories are suspect. One of the first psychoanalytic writers who focused on the direct treatment of children was Melanie Klein (1952). Klein felt that the internal

emotional world of children focuses on interpersonal relationships rather than on the control of impulses and drives.

Object relations theorists have been especially influential in further developing and fine-tuning current psychodynamic theory, research, and practice. The object relations theorists view infants as being relationship or *object* seeking rather than pleasure seeking. The early relationship with the mother provides the framework for the development of the sense of self. Thus, attachment to the mother provides the structure and approach for the development of psychological functioning and future relationships.

THE BEHAVIORAL AND COGNITIVE-BEHAVIORAL APPROACHES

The behavioral psychologist is often thought to control and manipulate behavior by giving reinforcements (such as M&M candies) to people when they behave in a desired manner and punishments (such as electric shocks) when they behave in an undesirable manner.

Sometimes people assume that psychologists who are behavioral in orientation are not warm and caring and that they have little interest or tolerance for non observable behavior such as feelings and fantasies. Popular films also help to perpetuate the image of a cold, aloof, mechanistic behaviorist concerned with specific behaviors rather than individuals.

Similar to the stereotype of the psychodynamic professional, the stereotype of the behaviorist is also outdated and inaccurate. Both behavioral and cognitive (thoughts and beliefs) focuses make up the broad behavioral/cognitive-behavioral perspective. Although some would argue that the behavioral and cognitive-behavioral viewpoints are separate, in this review, I combine these perspectives because they are generally more similar than divergent in their assumptions about human nature and behavioral change. Furthermore, the cognitive-behavioral approach generally draws on behaviorism rather than cognitive neuroscience or cognitive psychology. However, many contemporary cognitive theorists use cognitive science and information processing methods to enhance their theories and applications. I refer to the cognitive-behavioral perspective as including both the strictly traditional behavioral perspective (the theories of B. F. Skinner) as well as the newer cognitive perspective. Like the psychodynamic approach, the cognitive-behavioral approach subsumes a wealth of sub perspectives associated with specific leading authors who develop and advocate certain theories and techniques. These leaders in cognitive-behavioral psychology include Albert Ellis, Aaron Beck, Arnold Lazarus, Leonard Krasner, Joseph Wolpe, B. F. Skinner, Donald Meichenbaum, Marsha Linehan, among others.

The **cognitive-behavioral** approach is historically based on the principles of learning and has its roots in the academic experimental psychology and conditioning research conducted by B. F.

Skinner, John Watson, Clarke Hull, Edward Thorndike, William James, Ivan Pavlov, and others. The cognitive-behavioral approach focuses on overt (i.e., observable behavior) and covert (non-observable behavior such as thinking) behaviors acquired through learning and conditioning in the social environment. Basic assumptions that provide the foundation of the cognitive-behavioral approach include a focus on current rather than past experiences, the emphasis on measurable and observable behavior, the importance of environmental influences on the development of both normal and problematic behavior, and an emphasis on empirical research methods to develop assessment and treatment strategies and interventions.

Cognitive-behavioral perspectives include principles of operant conditioning, classical conditioning, social learning, and attribution theories to help assess and treat a wide variety of difficulties. For example, operant conditioning may be used to help a child improve his or her behavior and performance in a classroom setting. A child might obtain reinforcements such as stickers or social praise from the teacher for improved classroom behavior that is defined, for example, as being more attentive, talking less with peers during classroom instruction, and improving test scores.

Contingency management (changing behavior by altering the consequences that follow behavior) and **behavioral rehearsal** (practicing appropriate behavior) may also be used. Classical conditioning techniques might be used to help someone overcome various fears and anxieties. Someone who is fearful of dogs, for example, might learn to overcome this fear through the use of systematic desensitization (a technique developed by Wolpe, 1958), **counter conditioning** (developing a more adaptive response to dogs), or by **exposure** such as a gradual approach to being with dogs. Social learning might be used to help a child undergoing a painful medical procedure (such as a bone marrow transplant) to cope with the anxiety and pain associated with the procedure. For example, the child might watch an educational video of other children who cope well with the medical procedure.

Furthermore, long-standing and maladaptive beliefs may contribute to many psychological problems such as depression and anxiety. Maladaptive irrational and automatic thoughts such as, “I’m a failure,” “No one will love me,” and “I can’t do anything right,” might be examined, challenged, and altered using cognitive-behavioral techniques such as **thought stopping** and rehearsal of positive self statements. There are numerous cognitive-behavioral techniques that may be employed to help assess and alter behavior.

The Cognitive Perspective: Beliefs, Appraisals, and Attributions: The cognitive perspective originated with the work and writings of several professionals notably including Aaron Beck and Albert Ellis. The cognitive

perspective suggests that our beliefs, appraisals, and attributions play a significant role in behavior and behavioral problems. *Appraisals* include the manner in which we examine or evaluate our behavior. For example, if a soccer player thinks her athletic abilities are mediocre, she will evaluate all of her successes and failures in this light. If the soccer player has an exceptionally great game, she may attribute her good fortune to luck or poor performance on the part of the opposing team. If Mary feels that her attempts to develop more independence are hampered by marginal skills and motivation, she will more likely fail.

Attributions refer to theories regarding the causes of behavior. We generally make attributions about behavior based on several factors. These factors include the concepts of the internal versus external locus of control as well as situational versus dispositional characteristics. *Internal locus of control* refers to feeling that we have control and influence over much of our life experiences while *external locus of control* refers to feeling that we have very little control or influence over what happens to us. For example, success in life due to hard work and being smart reflects an internal locus of control while luck or fate reflects an external locus of control.

Situational factors refer to external influences impacting behavior, and *dispositional factors* refer to enduring characteristics of the person impacting behavior. For example, driving through a red light without stopping due to distraction from a heated conversation with a passenger would reflect a situational attribution while driving through the red light because the person is a careless and reckless driver would reflect a dispositional attribution.

Albert Ellis (1962, 1977, 1980) and other professionals have focused on irrational beliefs and self-talk that lead to problematic feelings and behavior. For example, common beliefs such as “everyone should agree with me,” “everyone should appreciate me and my talents,” “no one could love someone as unattractive as me,” and “I should always be patient with my children and spouse” result in inevitable failure and disappointment. Ellis and others use techniques such as *rational emotive therapy* (RET) to help individuals think and process beliefs in a more rational manner. These techniques involve using logic and reason to challenge irrational and maladaptive thoughts and beliefs (e.g., “So do you really think that everyone you meet must like you in order to be a worthy human being?”). This approach relies on persuasion and reason to alter beliefs about self and others. For example, Ellis’s focus on irrational beliefs is related to Mary’s beliefs about her panic. Mary feels that if she experiences even a little anxiety while taking a bus or sitting in church, she is a failure and a weak person.

The therapist helps Mary to see that her beliefs are irrational and unrealistic and encourages her to develop more adaptive self-talk regarding her anxiety (e.g., “Even if I’m anxious, I can still overcome my fear and take the bus. I don’t need to have my anxiety control me; I can control it”).

THE HUMANISTIC APPROACH

The stereotype of the **humanistic** practitioner typically conjures a warm and supportive individual who does not provide any direct advice or suggestions to his patients. The stereotype of the humanistic psychologist involves an individual who, although friendly, says little more than, “uhmm” and benign comments such as “I hear you” or “I feel your pain.” Images of encounter groups or T-groups from the 1960s might emerge. Again, like the behavioral and psychodynamic orientations, stereotypes about humanistic approach are also outdated and inaccurate.

The humanistic approach has its roots in European philosophy as well as in the psychotherapeutic work of Victor Frankl, Carl Rogers, Abraham Maslow, Rollo May, Fritz Perls, and other mental health professionals.

In rejecting the basic assumptions of the psychodynamic and behavioral theories, the humanistic theorists assume a *phenomenological* approach that emphasizes each individual’s perception and experience of his or her world . The humanistic perspective tends to view people as being active, thinking, creative, and growth oriented. Helping others is partially accomplished through understanding concerns, feelings, and behavior through the eyes of the patient. Humanistic professionals tend to assume that people are basically well intentioned and that they naturally strive toward growth, love, creativity, and selfactualization.

The Client-Centered Perspective: The **client centered** perspective of Carl Rogers stands out as the most classic example of the humanistic approach. Rogers used nondirective techniques such as **active listening, empathy**, congruence, and unconditional positive regard to understand and help others. Rogers felt that sincere empathy was needed in order for people to feel accepted and understood, and ultimately to enable growth to occur. **Unconditional positive regard** refers to the belief that no one should be negatively judged or evaluated in the therapy experience or elsewhere. Rather, respect and acceptance should prevail. Unconditional positive regard can be a challenge for professionals working with individuals who have attitudes or behaviors that one finds offensive (e.g., sexual abuse of children, stealing, racist comments).

Unconditional positive regard does not mean that these behaviors or attitudes are accepted as being okay. Rather, it is the person who is fully accepted. Therefore, respect and a nonjudgmental attitude are advocated. **Congruence**, or genuineness, refers to harmony between one’s feelings and actions. Thus, the professional should strive toward emotional honesty in his or her relationship with others. Genuineness also implies that the professional will not try to hide his or her feelings from others, yet still present a professional attitude and demeanor.

Maslow’s Humanistic Perspective: Abraham Maslow (Maslow, 1954, 1971) originated a further variation of the humanistic approach. He emphasized the importance of **self actualization** that

refers to the impulse and desire to develop fully one's potential. His focus on self-actualization highlighted the role of unmet needs. He felt that humans have a hierarchy of needs beginning with basic biological requirements for food, water, and warmth. Once these needs are met, one is free to focus on higher level needs such as safety and security. Again, as these higher level needs are met, one can then focus on needs for love, belonging, and acceptance.

Finally, at the top of the hierarchy is self-actualization. Maslow believed that people who experienced self-actualization were characterized by an acceptance of themselves and others, efficient perceptions of reality, social interests, creativeness, mystical or "**peak**" **experiences**, as well as other qualities (Maslow, 1971). Although Maslow believed that everyone has the potential to achieve self-actualization, few were thought to succeed because of unmet needs at lower levels. Maslow felt that less than 1% of the population ever reach self-actualization. Therefore, problems in feelings, thoughts, behavior, and relationships emerge because many people are *deficiency-motivated* in that they are trying to fulfill unmet needs. Maslow referred to those moments when self-actualization is actually reached as peak experiences. Although Maslow's theories have received a great deal of attention and acceptance, he offered little in terms of specific techniques to use in psychological assessment or treatment.

The Gestalt Perspective: The **gestalt** perspective within the humanistic approach originated with the work of Fritz Perls (Perls, 1947, 1969). Assumptions of the gestalt approach include the notion that problems occur due to our inability to be truly aware of our current feelings, thoughts, and behavior and to our inordinate focus on the past and future rather than the present. The gestalt approach focuses on being keenly aware of one's *here and now* or present experience. The gestalt approach seeks to help people live in the immediate moment by frequently requesting that people work toward an awareness of current thoughts and feelings. Taking personal responsibility for one's feelings, thoughts, behavior, and choices is also of paramount importance for those using the gestalt perspective. Techniques include making believe that an important someone such as a spouse, boss, or mother is in the room with you sitting in an empty chair. Talking to the person as if they were there helps someone become better in touch with feelings and behavior.

THE FAMILY SYSTEMS APPROACH

The **family systems** approach emerged to overcome the limitations of other perspectives seeking to work only with the identified individual patient. The family systems approach emerged from research and treatments geared to address problems associated with interpersonal communication among schizophrenic patients and between family members. The family systems approach began with the Bateson group in Palo Alto, California, during the 1950s. The goals of the family systems approach commonly include improved communication among family members and a de-emphasis

on the problems of any one member in favor of attention to the family system as a whole. Family systems professionals meet with all family members rather than with just the person who has the identified problem(s).

Family systems professionals might also involve extended members of the family or other significant figures in the life of the family such as neighbors, friends, and teachers in their therapeutic work. Family systems perspectives maintain a systemic view of problems and relationships. That is, they suggest that any change in the behavior or functioning of any one member of the family system is likely to influence other members of the system.

Therefore, even if improved psychological functioning and behavior is achieved in individual members, others must adjust to and contribute to these new changes in family functioning. Paradoxically, improvements among some family members may lead to problems among other family members. This is based on five approaches:

The Communication Approach: The communication approach was developed by Virginia Satir (1967) and colleagues at the Mental Research Institute (MRI) in Palo Alto, California. Reframing Altering the way one understands and interprets a given behavior.

The approach suggests that problems in effective communication contribute to family problems and dysfunction. Unspoken and unreasonable expectations, rules, and assumptions about how family members should relate to one another and live their lives result in conflict and problems in family functioning. Satir outlined several communication styles in families, which include placating, blaming, superreasonable, irrelevant, and congruent. In problem families the father may be *superreasonable*, maintaining a rational style and keeping his feelings to himself. The mother may placate the father by agreeing with him and not expressing her feelings. One of the children may use a *blaming* style attributing all of his or her problems in school and at home on someone else.

Irrelevant communication might involve annoying habits on the part of a sibling. Satir encourages family members to embrace *congruent communication*, which focuses on expressing genuine feelings.ful and important in the relationship.

The Structural Approach: The structural approach was developed by Salvador Minuchin (1974) and focuses on altering and restructuring the pattern of relationships between family members. The structural perspective focuses on appropriate and adaptive levels of **differentiation, enmeshment, and disengagement** among family members (Minuchin, 1974; Minuchin & Fishman, 1981).

The Milan approach: highly view neutrality as well as acceptance and respect the family system. It is based on team approach.

The Strategic Approach: The **strategic approach** was developed by Jay Haley (1973, 1987) and others such as Milton Erikson (1980) to help professionals deal more effectively with resistance in

their work. The approach utilizes very active and direct involvement by the clinician. The strategic perspective maintains that any attempt to change a member or set of members within a family system will be met with resistance and sabotage (conscious or unconscious). Therefore, the professional must find ways to combat this resistance by directing and altering the behavior of the family. One of the most common and well-known examples of a strategic intervention involves the use of *paradoxical* techniques. Paradoxical approaches are often referred to by the general public as “reverse psychology.” Another technique utilized by strategic clinicians is reframing. **Reframing** involves reinterpretation of a behavior or issue in a new and different light. Therefore, behaviors considered negative by the family may be reinterpreted as being positive. For example, a child who steals might be viewed as trying to alert the family to their emotional deprivation and neediness. Mary’s panic behavior might be reframed as being an attempt to stay close to her husband and to help him feel more powerful and masculine. An adolescent who has run away from home and made poor choices could be viewed as “doing the wrong things for the right reasons” (i.e., increased independence). *The Narrative Approach*: The **narrative approach** (M. White, 1986; M. White & Epston, 1990) holds that family members conceptualize their problems and concerns through a series of stories about their lives and various members of the family system.

CHAPTER FOUR

CONCEPT OF PSYCHOLOGICAL ASSESSMENT IN CLINICAL PSYCHOLOGY

CLINICAL ASSESSEMENT I: INTREVIEW AND OBSERVATION

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.

THE CLINICAL 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.

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:

- ψ The intake / admission interview
- ψ The case history interview
- ψ Mental status examination interview
- ψ The crisis interview
- ψ Diagnostic interview
- ψ 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”.

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.

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 asses 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 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.

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.

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.

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.

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.

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.

Prophesy (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 o 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.

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 assesses, 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 Oil 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.

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 are 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 YaleBrown 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.

CHAPTER FIVE

CLINICAL ASSESMENT II: COGNITIVE AND PERSONALITY ASSESSEMENT

Cognitive testing is a general term referring to the assessment of a wide range of information processing or thinking skills and behaviors. These comprise general neuropsychological functions involving brain-behavior relationships, general intellectual functions (such as reasoning and problem solving) as well as more specific cognitive skills (such as visual and auditory memory), language skills, pattern recognition, finger dexterity, visual perceptual skills, academic skills, and motor functions. Cognitive testing may include aptitude testing (which assesses cognitive potential such as general intelligence) and achievement testing (which assesses proficiency in specific skills such as reading or mathematics). Cognitive testing uses well-known tests such as the Scholastic Aptitude Test (SAT) and intelligence quotient (IQ) tests of all kinds. Thus, cognitive testing is an umbrella term that refers to many different types of tests measuring many different types of thinking and learning skills.

Intelligence Testing

Measuring intellectual ability has long been a major activity and interest of clinical psychologists. the goals of **intellectual testing** during the earliest years of the field were to evaluate children in order to help them maximize their educational experience and to assist teachers in develop curricula for children with special needs. Intelligence testing was also used to screen military recruits. Today, it is still used for these purposes. However, it is also employed for vocational planning, assessing learning disabilities, determining eligibility for gifted and special education programs, and examining brain-behavior relationships following head injuries, strokes, or other medical conditions. Intellectual testing is used not only to obtain an IQ score, but to learn more about an individual's overall cognitive strengths and weaknesses.

What Is Intelligence?

Unfortunately, there is no definition or theory of intelligence that all experts agree upon. Controversy exists among the numerous professionals who specialize in intelligence research and testing concerning how best to define and understand intelligence (Sternberg, 1997a). In fact, there

are so many definitions that Sternberg and Kay (1982) suggested that there were more definitions than experts! Even as early as 1923, Boring (1923) cynically defined intelligence as what intelligence tests measure. The most influential and often-cited definitions and theories of intelligence include those offered by Spearman (1927), Thurstone (1931, 1938), Cattell (1963, 1971, 1979), Guilford (1967, 1979, 1985), Piaget (1952, 1970, 1972), and, more recently, Sternberg (1996, 1997a), Gardner (1983, 1986, 1994), and Goleman (1995). While it is beyond the scope of this book to present detailed descriptions of all these definitions and theories, a brief overview will help put in context the types of tests currently available to measure intellectual, or cognitive, functioning.

Spearman (1927) offered a two-factor theory of intelligence that suggested that any intellectual task or challenge required the input of two factors: general abilities of intelligence (which Spearman referred to as *g*) and specific abilities of intelligence (referred to as *s*). Overall, Spearman emphasized through factor analysis research that intelligence was primarily a broad-based and general ability. Factor analysis is a complex statistical technique that helps to identify specific factors from sets of variables. Spearman's notion of intelligence as a comprehensive overall general ability has greatly influenced not only the conception of intelligence but also the development of intelligence tests for many years.

Also using factor analysis, Thurstone (1931, 1938) disagreed with Spearman and suggested that intelligence included nine unique and independent skills or primary mental abilities: verbal relations, words, perceptual ability, spatial ability, induction, deduction, numerical ability, arithmetic reasoning, and memory. Thurstone thus focused on distinct and separate abilities that together comprise intelligence.

Cattell (1963, 1971, 1979) expanded Spearman's two-factor theory regarding the notion of a broad-based general intelligence (*g*) factor and suggested that it consisted of two components that included both fluid and crystallized abilities. Cattell defined fluid abilities as the person's genetic or inborn intellectual abilities, whereas crystallized abilities are what a person learns through experience, culture, and various opportunities arising from interaction with the world. Fluid abilities resemble Spearman's *g* and refer to general problem-solving abilities, abstract reasoning, and ability to integrate and synthesize information quickly and efficiently. Crystallized abilities resemble Spearman's *s* and refer to specific skills developed and nurtured through training and experience. Cattell and colleagues also included the role of motivation, personality, and culture in their investigation and understanding of intelligence.

How Do Clinical Psychologists Measure Intelligence?

There are hundreds of tests that propose to measure intelligence or cognitive ability. Different tests have been developed for use with various populations such as children, adults, ethnic minority group members, the gifted, and the disabled (e.g., visually, hearing, or motorically impaired individuals). Some tests are administered individually, while others are administered in groups. Some tests have used extensive research to examine reliability and validity, whereas others have very little research support. Some are easy to administer and score, while others are very difficult to use. Although there are many intelligence tests to choose from, only a small

handful of tests tend to be used consistently and widely by most psychologists. Clearly, the most popular and frequently administered tests include the **Wechsler Scales** (i.e., the Wechsler Adult Intelligence Scale-Third Edition [WAIS-III], the WAIS-R as a Neuropsychological Instrument [WAIS-R NI], the Wechsler Intelligence Scale of Children- Fourth Edition [WISC-IV], the Wechsler Primary and Preschool Scale-Third Edition [WPPSI-III]). The second most frequently used intelligence test is the Stanford-Binet (Fifth Edition). Other popular choices include the Kaufman Assessment Battery for Children (K-ABC) and the Woodcock-Johnson Psycho-educational Battery.

Wechsler Scales

WECHSLER SCALES FOR ADULTS: The Wechsler- Bellevue Intelligence Scale was developed and published by David Wechsler (1896–1981) in 1939. The test was revised in 1955 and renamed the Wechsler Adult Intelligence Scale (WAIS) and revised again in 1981 as the Wechsler Adult Intelligence Scale-Revised (WAIS-R; Wechsler, 1981). The most recent edition is the scale of the third edition published in 1997 (WAIS-III; Wechsler, 1997a) and thus the WAIS-III is the current version of the test in use today. The WAIS-III consists of seven individual verbal subtests (Information, Similarities, Arithmetic, Vocabulary, Comprehension, Digit Span, and Letter-Numbering Sequencing) and seven Performance (or nonverbal) subtests (Picture Completion, Picture Arrangement, Block Design, Object Assembly, Matrix Reasoning, Digit Symbol, and Symbol Search). Each subtest includes a variety of items that assess a particular intellectual skill of interest (e.g., the vocabulary subtest includes a list of words that the respondent must define). The WAIS-III generally takes about one to one-and-a-half hours to individually administer to someone between the ages of 16 and 74. Three IQ scores are determined using the WAIS-III: a Verbal IQ, a Performance IQ, and a Full Scale (combining both Verbal and Performance) IQ score. The mean IQ score for each of these three categories is 100 with a standard deviation of 15. Scores between 90 and 110 are considered within the average range of intellectual functioning. Scores below 70 are considered to be in the mentally deficient range, while scores

above 130 are considered to be in the very superior range. The individual subtests (e.g., Vocabulary, Block Design) have a mean of 10 and a standard deviation of 3. These subtests form the basis for subtle observations about the relative strengths and weaknesses possessed by each individual.

Table 8 Descriptions of the WAIS-III Subtests

<u>Subtest</u>	<u>Description</u>
Picture completion ----	A set of color pictures of common objects and settings, each of which is missing an important part that the examinee must identify
Vocabulary -----	series of orally and visually presented words that the examinee orally defines
Digit Symbol -----	Coding A series of numbers, each of which is paired with its own corresponding hieroglyphic-like symbol. Using a key, the examinee writes the symbol corresponding to its number
Similarities -----	A series of orally presented pairs of words for which the examinee explains the similarity of the common objects or concepts they represent
Block Design -----	A set of modeled or printed two-dimensional geometric patterns that the examinee replicates using two-color cubes
Arithmetic -----	A series of arithmetic problems that the examinee solves mentally and responds to orally
Matrix Reasoning --	A series of incomplete gridded patterns that the examinee completes by pointing to or saying the number of the correct response from five possible choices.
Digit Span -----	A series of orally presented number sequences that the examinee repeats verbatim for Digits Forward and in reverse for Digits Backward .
Information -----	A series of orally presented questions that tap the examinee’s knowledge of common events, objects, places, and people
Picture Arrangement ----	A set of pictures presented in a mixed-up order that the examinee rearranges into a logical story sequence
Comprehension ---	A series of orally presented questions that require the examinee to understand and articulate social rule and concepts or solutions to everyday problems
Symbol Search ---	A series of paired groups, each pair consisting of a target group and a search group. The examinees indicates, by marking the appropriate box, whether either target symbol appears in the search group
Letter-Number Sequencing ---	A series of orally presented sequences of letters and numbers that the examinee simultaneously tracks and orally repeats, with the number in ascending order and the letters in alphabetical order
Object Assembly ---	A seat of puzzles of common objects, each presented in a standardized

configuration, that the examinee assembles to form a meaningful whole.

In addition to overall IQ scores, most psychologists make inferences about cognitive strengths and weaknesses by examining the pattern of scores obtained on each WAIS-III subtest. For example, high scores on the vocabulary subtest relative to very low scores on the block design subject might suggest that the person has good use of language in solving problems and a poorer ability to solve problems using certain perceptual and motor integration skills. Additionally, the Wechsler scales can be helpful in learning about neuropsychological problems such as brain damage (E. Kaplan et al., 1991; E Kaplan et al., 1999), as well as psychological and personality functioning (Allison, Blatt, & Zimet, 1968).

Finally, IQ tests should always be interpreted in the context of other assessment measures. As subsequent examples will illustrate, even a seemingly straightforward IQ test needs to be integrated with other test results as well as the panoply of bio-psychosocial factors impacting the individual and his or her performance. Otherwise, the scores in isolation can be rendered meaningless or even misleading.

THE WECHSLER SCALES FOR CHILDREN: The Wechsler Intelligence Scale for Children (WISC) was first published in 1949 and was revised in 1974 (and renamed the Wechsler Intelligence Scale for Children- Revised; WISC-R) and revised again in 1991 (renamed the Wechsler Intelligence Scale for Children-Third Edition; WISC-III) and again in 2003 (now named the Wechsler Intelligence Scale for Children-Fourth Edition).

The WISC-IV is the version currently used today. The WISC-IV has both verbal and nonverbal subscales similar to those used in the WAIS-III. However, WISC-IV questions are generally simpler because they were developed for children aged 6 to 16 rather than for adults. Furthermore, they are clustered in four categories that represent different areas of intellectual functioning. These include Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed. Each of these four areas of intellectual functioning include both “core” or mandatory subtests that must be administered to derive an index or IQ score as well as at least one “supplementary” or optional subtest that is not included in the index or IQ score. The Verbal Comprehension category consists of three core subtests including Similarities, Vocabulary, and Comprehension as well as two supplementary subtest that include Information and Word Reasoning. The Perceptual Reasoning category also consists of three core subtests, including Block Design, Picture Concepts, and Matrix Reasoning as well as one supplementary subtest called Picture Completion. The Working memory category consists of two core subtests including Digit Span and Letter-Number Sequencing as well as one supplementary subtest entitled Arithmetic.

Finally, the Processing Speed category consists of two core subtests including Coding and Symbol Search as well as one supplementary subtest entitled Cancellation. The WISC-IV provides

four index score IQs as well as an overall or full-scale IQ based on the scores from all of the four index scores. These IQ scores all are set with a mean of 100 and a standard deviation of 15. The four factor scores (i.e., Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed) were developed using actor analytic techniques and numerous research studies to reflect human intellectual functioning. Each of the subtests use a mean of 10 and standard deviation of 3. The WISCIV has been shown to have excellent reliability, validity, and stability (Wechsler, 2003).

The *Wechsler Preschool and Primary Scale of Intelligence* (WPPSI) was developed and published in 1967 for use with children aged 4 to 6. The test was revised in 1989 and became known as the Wechsler Preschool and Primary Scale of Intelligence-Revised (WPPSI-R) and revised again in 2002 as the WPPSI-III. The WPPSI-III is the current version of the test being used today. The WPPSI-III is used for children ranging in age from 2 to 7. Like the other Wechsler scales (WAIS-III, WAIS-III NI, WISC-IV), the WPPSI-III has both Verbal and Performance scales resulting in four IQ scores: Verbal IQ, Performance IQ, Processing Speed IQ, and Full Scale IQ. Similar to the other Wechsler scales, IQ scores have a mean of 100 and a standard deviation of 15, while the subtest scores have a mean of 10 and a standard deviation of 3. The Verbal IQ score consists of the Information, Vocabulary, and Word Reasoning subtest while the Comprehension and Similarities subtests are not included in the calculation of the Verbal IQ score. The Performance IQ consists of the Block Design, Matrix Reasoning, and Picture Concept subtests while the Picture Completion and Object Assembly are not included in the calculation of the Performance IQ score. The Processing Speed IQ score consists of the Symbol Search and Coding Subtest. The WPPSI-III has been shown to have satisfaction, reliability, validity, and stability (Wechsler, 2002).

Stanford-Binet Scales: The Stanford-Binet is a revised version of the first standardized intelligence test, developed by Alfred Binet in 1905. The test has been revised many times—in 1916, 1937, 1960, 1986, and most recently, in 2003. The current version of the test is called the Stanford-Binet-Fifth Edition (Roid & Barram, 2004). The Stanford-Binet can be used with individuals from 2 years of age through adulthood.

The Stanford-Binet Scales consists of Nonverbal (NV) and Verbal (V) domains. Together, they produce a full-scale IQ score. Furthermore, factor scores or indexes are provided in five areas including Fluid Reasoning (FR), Knowledge (KN), Visual-Spatial processing (VS), Working Memory (WM), and Quantitative Reasoning (QR). Fluid Reasoning subtests include Object Series/Matrices, Early Reasoning, Verbal Absurdities, and Verbal Analogies. Knowledge subtests includes Vocabulary, Procedural Knowledge, and Picture Absurdities. Visual- Spatial processing subtest include Form Board, Form Patterns, Position and Direction.

The Working Memory subtests include Block Span, Memory for Sentences, and Last Word. Finally, Quantitative Reasoning subtests include one subtest called Quantitative Reasoning. Unlike the Wechsler scales, only certain Stanford-Binet subtests are used with certain subjects. The age of the subject determines which subtests are used in any given evaluation. Scores from all subtest categories are used to derive IQ scores based on a mean of 100 and a standard deviation of 15. Research suggests that the Stanford-Binet has satisfactory reliability, validity, and stability.

Personality Testing

Personality testing in a sense accesses the heart and soul of an individual's psyche. Personality testing strives to observe and describe the structure and content of personality, which can be defined as the characteristic ways in which an individual thinks, feels, and behaves.

Personality testing is particularly useful in clarifying diagnosis, problematic patterns and symptoms, intrapsychic and interpersonal dynamics, and treatment implications. Personality testing involves a wide variety of both objective and projective measures, both of which will be discussed in detail after the following explanations of the concepts *personality* and *psychological functioning*.

What Are Personality and Psychological Functioning?

Each human being has a unique manner of interacting with the world. Some people tend to be shy and withdrawn, while others are generally outgoing and gregarious. Some tend to be anxious worriers, while others are generally calm and relaxed. Some are highly organized and pay attention to detail, while others are disorganized and impressionistic. *Personality* refers to the enduring styles of thinking and behaving when interacting with the world (Hogan, Hogan, & Roberts, 1996; MacKinnon, 1944; McCrae & Costa, 2003). Thus, it includes characteristic patterns that make each person unique. These characteristics can be assessed and compared with those of others. Personality is influenced by biological, psychological, and social factors. For example, research has shown that between 20% and 60% of the variance in personality traits (e.g., extroversion, sociability) are influenced by genetic factors (Loehlin, 1992; Plomin, 1990),

with the remainder influenced by psychosocial factors (e.g., relationships that develop with parents, siblings, and friends, as well as life events; T. J. Bouchard & McGue, 1990). While the nature versus nurture debate rages on well beyond statistical models, personality development clearly reflects biological, psychological, and social factors. Personality theories provide a way to understand how people develop, change, and experience generally stable and enduring behavior and thinking patterns. These theories also help us to understand the differences among people that make each person unique. Ultimately, personality theory is used to understand and predict behavior. This understanding is then used to develop intervention strategies to help people change problematic patterns.

Psychological functioning is a more general term referring to the individual's cognitive, personality, and emotional worlds. Thus, psychological functioning includes personality as well as other aspects of emotional, behavioral, cognitive, and interpersonal functioning.

In this section, psychological functioning refers to particularly noncognitive areas of functioning such as mood and interpersonal relationships. For example, while anxiety, depression, and anger may all be enduring personality traits, they can also be temporary mood states. Someone facing stressful life events, such as the death of a loved one or criminal victimization, may experience severe anxiety, depression, or anger. However, these mood states may not be associated with enduring personality characteristics. Thus, the individual may feel and behave in an anxious or depressed manner as a reaction to the stressful event(s) but does not tend to be anxious or depressed most of the time. Therefore, psychological functioning can be viewed as encompassing the gamut of component psychological processes as they impact one's ability to cope with life's pleasures and demands and uniquely combine to define personality.

Is Personality Really Enduring?

The famous psychologist, William James (1890) stated that by the age of 30 personality was "set in plaster." While a tremendous amount of research has been conducted on personality, controversy still exists concerning its definition and characteristics (Beutler & Groth-Marnat, 2003; Kenrick & Funder, 1988; West & Graziano, 1989). Some people question the very notion of personality, suggesting that enduring behavioral characteristics do not exist. While many believe that behavior is consistent across situations (e.g., a shy person is likely to behave in a shy manner wherever he or she goes), many argue that behavior is generally situation specific. Thus, someone may behave in a shy manner in a social situation with people he or she does not know very well while he or she might behave in a very outgoing manner at work or with close friends. Most professionals in the area of personality theory, research, and practice support an interactional approach (Kenrick & Funder, 1988). This approach suggests that behavior is predictable but is not rigidly consistent in an absolute sense. Therefore, people have personality styles that are generally consistent but interact with situational factors (McCrae & Costa, 2003); personality and behavior differs somewhat from situation to situation.

How Do Clinical Psychologists Measure Personality and Psychological Functioning?

In addition to using interviews, observations, checklists, inventories, and even biological assessments (e.g., neuroimaging techniques such as PET scans), clinical psychologists generally use a range of tests to assess personality and psychological functioning. Most of these tests can be classified as either objective or projective. Objective testing presents very specific questions (e.g., Do you feel sad more days than not?) or statements (e.g., I feel rested) to which the person responds by using specific answers (e.g., yes/no, true/false, multiple choice) or a rating scale (e.g., 1 =

strongly disagree, 10 = strongly agree). Scores are tabulated and then compared with those of reference groups, using national norms. Thus, scores that reflect specific constructs (e.g., anxiety, depression, psychotic thinking, stress) may be compared to determine exactly how anxious, depressed, psychotic, or stressed someone might be relative to the norm. The checklists described in the previous chapter are examples of objective tests. Projective testing uses ambiguous or unstructured testing stimuli such as inkblots, incomplete sentences, or pictures of people engaged in various activities. Rather than answering specific questions using specific structured responses (e.g., yes/no, true/false, agree/disagree) subjects are asked to respond freely to the testing stimuli. For example, they are asked to tell stories about pictures, or describe what they see in an inkblot, or say the first thing that comes to their mind when hearing a word or sentence fragment. The theory behind projective testing is that unconscious or conscious needs, interests, dynamics, and motivations are projected onto the ambiguous testing stimuli, thereby revealing the internal dynamics or personality. Projective responses are generally much more challenging to score and interpret than objective responses.

Objective Testing: There are hundreds of objective tests of personality and psychological functioning. The reader may wish to consult other resources for detailed information about these instruments (e.g., Anastasi & Urbina, 1996). Clinical psychologists usually employ a small set of objective tests to evaluate personality and psychological functioning.

By far the most commonly used test is the Minnesota Multiphasic Personality Inventory (MMPI), now in its second edition (MMPI-2). The MMPI also includes an adolescent version called the Minnesota Multiphasic Personality Inventory-Adolescents (MMPIA). Other objective tests such as the Millon Clinical Multiaxial Inventory-III (MCMI-III), the 16 Personality ±Factors Questionnaire, Fifth Edition (16PF), and the NEO-Personality Inventory-Revised (NEO-PI-R) will also be briefly discussed below.

THE MINNESOTA MULTIPHASIC PERSONALITY INVENTORY (MMPI, MMPI-2, MMPIA)

The original MMPI was developed during the late 1930s and published in 1943 by psychologist Starke Hathaway and psychiatrist J. C. McKinley. The MMPI was revised and became available as the MMPI-2 in 1989. The original MMPI consisted of 550 true/false items. The items were selected from a series of other personality tests and from the developers' clinical experience in an effort to provide psychiatric diagnoses for mental patients. The original pool of about 1000 test items were considered and about 500 items were administered to psychiatric patients and visitors at the University of Minnesota hospitals. The MMPI was designed to be used with individuals ages 16 through adulthood. However, the test has been frequently used with adolescents younger than 16. The MMPI takes about one to one-and-a-half hours to complete. Scoring the MMPI results in four

validity measures and ten clinical measures. The validity measures include the ? (Cannot Say), L (Lie), F (Validity), and K (Correction) scales.

Admitting to many problems or “faking bad” is reflected in an inverted V configuration with low scores on the L and K scales and a high score on the F scale. Presenting oneself in a favorable light or “faking good” is reflected in a V configuration with high scores on the L and K scales and a low score on the F scale. The clinical scales include Hypochondriasis (Hs), Depression (D), Conversion Hysteria (Hy), Psychopathic deviate (Pd), Masculinityfemininity (Mf), Paranoia (Pa), Psychasthenia (Pt), Schizophrenia (Sc), Hypomania (Ma), and Social Introversion (Si). Scores are normed using standardized T-scores, meaning that each scale has a mean of 50 and a standard deviation of 10. Scores above 65 (representing one-and-one-half standard deviations above the mean) are considered elevated, and in the clinical range. While 65 is the cut off score on the MMPI-2 and MMPI-A, 70 is used with the original MMPI. Table 8.4 provides a description of each of the MMPI scales.

Since the MMPI was originally published, a number of additional subscales have been developed, including measures such as Repression, Anxiety, Ego Strength, Overcontrolled Hostility, and Dominance. It has been estimated that there are over 400 subtests of the MMPI (Dahlstrom, Welsh, & Dahlstrom, 1975). The MMPI has been used in well over 10,000 studies that examine a wide range of clinical issues and problems (Graham, 1990).

Although the original MMPI was the most widely used psychological test, a revision was needed. For example, the MMPI did not use a representative sample when it was constructed. The original sample included

Table 8.4 **MMPI-2 Scales and Personality Dimension Measured**

Scale name	Personality dimension
Valid scales	
(Cannot Say)	Number of items unanswered
(Lie)	Overly positive self report
(Validity)	Admitting to many problems
(Correction)	Defensiveness
<i>Clinical Scales</i>	
Hypochondriasis (Hs)	Concern regarding bodily functioning
Depression (D)	Hopelessness, pessimism
Conversion Hysteria (Hy)	Psychological conflict and distress manifested as somatic problems
Psychopathic Deviate (Pd)	Oppositional, disregard for social convention
Masculinity-Femininity (Mf)	Traditional masculine or feminine interests
Paranoia (Pa)	Mistrust, suspiciousness
Psychasthenia (Pt)	Fears, guilt, anxiety
Schizophrenia (Sc)	Idiosyncratic thinking, unusual thoughts & behavior
Hypomania (Ma)	Overactivity, emotional excitement
Social Introversion (Si)	Shy, insecurity

Caucasians living in the Minneapolis, Minnesota, area who were either patients or visitors at the University of Minnesota hospitals. Also, many of the more sophisticated methods of test construction and analysis used today were not available in the late 1930s when the test was developed. Therefore, during the late 1980s, the test was restandardized and many of the test items were rewritten. Furthermore, many new test items were added, and outdated items were eliminated. The resulting MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kraemmer, 1989) consists of 567 items and can be used with individuals aged 18 through adulthood. The MMPI-2 uses the same

validity and clinical scale names as the MMPI. Importantly, many have noted that the names reflecting each of the MMPI (or MMPI- 2) scales are misleading. For example, a high score on the Schizophrenia (Sc) scale does not necessarily mean that the person who completed the test is schizophrenic. Therefore, many clinicians and researchers prefer to ignore the scale names and use numbers to reflect each scale instead. For example, the Schizophrenia (Sc) scale is referred to as Scale 8 (see Table above). Like the original MMPI, the MMPI-2 has numerous subscales, including measures such as Type A behavior, post-traumatic stress, obsessions, and fears. The Minnesota Multiphasic Personality Inventory-Adolescent (MMPI-A) (Butcher, et al., 1992) was developed for use with teens between the ages of 14 and 18. The MMPI-A has 478 true/false items and includes a number of validity measures in addition to those available in the MMPI and MMPI-2. The MMPI, MMPI-2, and MMPI-A can be scored by hand using templates for each scale or they can be computer scored. Most commercially available computer scoring programs offer indepth interpretive reports that fully describes the testing results and offer suggestions for treatment or other interventions. Scores are typically interpreted by reviewing the entire resulting profile rather than individual scale scores. Profile analysis is highlighted by examining pairs of high scores combinations. For example, high scores on the first three scales of the MMPI are referred to as the *neurotic triad* reflecting anxiety, depression, and somatic complaints. Research indicates that the MMPI, MMPI-2, and MMPI-A have acceptable reliability, stability, and validity (Butcher et al., 1989; Butcher et al., 1992; Graham, 1990; Parker et al., 1988). However, controversy exists concerning many aspects of the test. For example, the MacAndrew Scale was designed as a supplementary scale to classify those people with alcohol-related problems. The validity of the scale has been criticized and some authors have suggested that the scale no longer be used to examine alcohol problems (Gottesman & Prescott, 1989).

THE MILLON CLINICAL MULTIAXIAL INVENTORIES:

The **Millon Clinical Multiaxial Inventories (MCMI)** include several tests that assess personality functioning using the *DSM-IV* classification system and the Theodore Millon theory of personality (Millon, 1981). Unlike the MMPI-2, the Millon was specifically designed to assess personality disorders outlined in the DSM such as histrionic, borderline, paranoid, and obsessive compulsive personalities. The first Millon test was published in 1982; additional tests and revisions quickly developed during the 1980s and 1990s. The current tests include the Millon Clinical Multiaxial Inventory-III (MCMIII; Millon, Millon, & Davis, 1994), the Millon Adolescent Clinical Inventory (MACI; Millon et al., 1994), the Millon Behavioral Health Inventory (MBHI; Millon, Green, & Meagher, 1982), the Millon Clinical Multiaxial Inventory-II (MCMI-II; Millon, 1987), and the

Millon Adolescent Personality Inventory (MAPI; Millon, Millon, & Davis, 1982). The MBHI, however, is a health behavior inventory and not a measure of personality or psychological functioning per se. The MCMI-III will be highlighted here. The MCMI-III is a 175 true/false item questionnaire designed for persons ages 18 through adulthood and takes approximately 30 minutes to complete. It was designed to assess personality disorders and syndromes based on the DSM-IV system of classification. The MCMI-III includes 24 scales, including 14 personality pattern scales and 10 clinical syndrome scales. Furthermore, the MCMI-III also includes several validity measures.

THE SIXTEEN PERSONALITY FACTORS

(16PF): The 16PF was developed by Raymond Cattell and colleagues and is currently in its fifth edition (Cattell, Cattell, & Cattell, 1993). It is a 185-item multiple-choice questionnaire that takes approximately 45 minutes to complete. The 16PF is administered to individuals ages 16 years through adulthood. Scoring the 16PF results in 16 primary personality traits (e.g., apprehension prone) and five global factors that assess second-order personality characteristics (e.g., anxiety). Standardized scores from 1 to 10 or sten scores are used with means set at 5 and a standard deviation of 2. Table below lists the 16PF scales. The 16PF has been found to have acceptable stability, reliability, and validity (Anastasi & Urbina, 1996; Cattell et al., 1993).

Table 16PF (Fifth Edition) Measures

Global Factors Scales

- EX----- Extroversion
- AX -----Anxiety
- TM----- Tough-Mindedness
- IN -----Independence
- SC -----Self-Control

16 Primary Personality Traits

- | | |
|----------------------------|---------------------------|
| A -----Warmth | L----- Vigilance |
| B -----Reasoning | M -----Abstractedness |
| C -----Emotional Stability | N -----Privateness |
| E -----Dominance | O -----Apprehension |
| F -----Liveliness | Q1-----Openness to change |
| G -----Rule Consciousness | Q2----- Self Reliance |
| H-----Social Boldness | Q3----- Perfectionism |
| I -----Sensitivity | Q4 -----Tension |

THE NEO-PERSONALITY INVENTORY REVISÉD (NEO-PI-R): The NEO-PI-R (Costa & McCrae, 1985, 1989, 1992) is a 240-item questionnaire that uses a 5-point rating system. A brief 60-item version of the NEO-PI-R called the NEO-Five Factor Inventory (NEO-FF) is also available as well as an observer rating version (Form R). The NEO-PI-R measures the big five personality dimensions: neuroticism, extroversion, openness, agreeableness, and conscientiousness.

The big five or the five-factor model has been found to be consistent personality dimensions from factor analytic research conducted for over 40 years and across many cultures (Digman, 1990; McCrae & Costa, 2003). The NEO-PI traits are referred to as the big five because in many research studies they have been found to account for a great deal of variability in personality test scores (McCrae & Costa, 2003; Wiggins & Pincus, 1989). The NEO-PI-R has been found to be both reliable and valid (Costa & McCrae, 1992). Unlike the other objective tests mentioned, the NEO-PI-R does not include validity scales to assess subject response set.

THE RORSCHACH: The Rorschach is the famous inkblot test (Rorschach, 1921/1942, 1951). Many people are fascinated by the idea of using inkblots to investigate personality and psychological functioning. Of course, many people (including psychologists) are skeptical of projective techniques such as the Rorschach, questioning its validity as a measure of psychological functioning (Dana, 2000; Dawes, 1994; J. Wood, Lilienfeld, Garb, & Nezworski, 2000). The Rorschach is often mentioned in television shows or in films depicting psychological evaluations. Curiously, the idea of seeing objects in inkblots came from a common game in the 1800s called Blotto. Someone would put a drop of ink on a blank piece of paper and fold the paper in half, creating a unique inkblot. Others would then take turns identifying objects in the inkblots. Alfred Binet used this technique to examine imagination among children. Swiss psychiatrist Hermann Rorschach noticed that mental patients tended to respond very differently to this game relative to others. Thus, Blotto became the basis for the Rorschach test (Exner, 1976).

The Rorschach consists of 10 inkblots that are symmetrical; that is, the left side of each card is essentially a mirror image of the right side. The same 10 inkblots have been used (in the same order of presentation) since they were first developed by Herman Rorschach in 1921 (Rorschach, 1921/1942). Half of the cards are black, white, and gray, and half use color. While there are several different ways to administer the Rorschach and score, the vast majority of psychologists today use the method developed by John Exner (Exner, 1974, 1976, 1986, 1993, 2003; Exner & Weiner, 1995). Each card is handed to the patient with the question, "What might this be?" The psychologist writes down everything the patient says verbatim. During this free-association portion of the test, the psychologist does not question the patient. After all 10 cards are administered, the psychologist shows the patient each card a second time and asks questions that will help in scoring

the test. For example, the psychologist might say, “Now I’d like to show you the cards once again and ask you several questions about each card so that I can be sure that I see it as you do.” With each card, he or she asks a nonleading question such as, “What about the card made it look like a to you?” The psychologist looks for answers that will help him or her score the test in several categories such as location (i.e., the area of the blot being used), content (i.e., the nature of the object being described, such as a person, animal, or element of nature), determinants (i.e., the parts of the blot that the patient used in the response, such as form, color, the responses typically seen by others). This portion of the test is referred to as the inquiry.

Once the test is completed, scoring involves a highly complex system and analysis. Each response is carefully scored based on the content, location, determinants, and quality of the response. An actual scoring sheet, once completed, resembles a highly specialized and foreign language. Because the scoring process can be very complicated and may take a long time to complete, many experienced psychologists do not score the test in fine detail but rely on their clinical inference, experience, and judgment to answer clinical questions such as, Is the patient psychotic or not? Is the patient repressive or not? Is the patient depressed? The case studies of Martha and Xavier illustrate the use of the Rorschach. Various aspects of the Rorschach responses are associated with psychological functioning. For example, the frequent use of shading is generally considered to be reflective of anxiety and depression. The use of human movement and adequate number of popular responses are usually associated with adaptive and well-integrated psychological functioning. Numerous responses that attend to minor details of the blots often reflect obsessive compulsive traits. Frequent use of the white space around the blot is generally associated with compositionality and/or avoidance.

THE THEMATIC APPERCEPTION TEST (TAT): The TAT (Murray & Bellack, 1942; Tomkins, 1947) was developed during the late 1930s by Henry Murray and Christiana Morgan at Harvard University. The TAT was originally designed to measure personality factors in research settings. Specifically, it was used to investigate goals, central conflicts, needs, press (i.e., factors that facilitate or impede progress towards reaching goals) and achievement strivings associated with Henry Murray’s theory of personology (Murray, 1938). The TAT consists of 31 pictures (one of which is blank), most all of which depict people rather than objects. Some of the pictures are designed to be administered to males, some to females, and others to both genders (Figure 8.2). Generally only a selected number of cards (e.g., 10) are administered to any one patient. The psychologist introduces the test by telling the patient that he or she will be given a series of pictures and requested to tell a story about each. The patient is instructed to make up a story that reflects what the people in the picture are thinking, feeling, and doing and also to speculate on what led up

to the events depicted in the picture and what will happen in the future. After each card is presented to the patient, the psychologist writes down everything that is said verbatim.

Although a variety of complex scoring approaches have been developed (Murray, 1943; Shneidman, 1951), most clinicians use their clinical experience and judgment to analyze the themes that emerge from the patient's stories. Since clinicians generally do not officially score the TAT, conducting reliability and validity research is challenging.

Many feel that the TAT and other projective tests are more like a clinical interview than a test, and that the experience, training, and clinical judgment of the clinician determines the usefulness and accuracy of these instruments. Other tests similar to the TAT have been developed for special populations, such as the Robert's Apperception Test for Children (RATC; McArthur & Roberts, 1982) for use with elementary school children. The 27 pictures depict children interacting with parents, teachers, and peers. The Children's Apperception Test (CAT; Bellak, 1986) was developed for very young children and depicts animals interacting in various ways.



figure :An example of a TAT card.

PROJECTIVE DRAWINGS: Many clinicians ask both children and adults to draw pictures in order to assess their psychological functioning. Typically, people are asked to draw a house, a tree, a person, and their family doing something together. For the Draw-a-Person test (Machover, 1949), the House-Tree-Person Technique (Buck, 1948), and the Kinetic Family Drawing Technique, the patient is instructed to draw each picture in pencil on a separate blank piece of paper and to avoid the use of stick figures. Variations on the instructions have been used by many clinicians. For example, a popular variation on the Draw-a-Person test instructs the patient to draw

persons of the same and opposite sex and a person in the rain. Attempts to develop scoring criteria as well as research on the reliability and validity of these drawing techniques have been only moderately successful. Some researchers have been involved with developing scientific scoring procedures that maximize both reliability and validity and can be used as screening measures for cognitive and emotional. Yet these attempts have not generally been embraced by practicing clinicians. Many clinicians feel that these techniques are quick and easy methods to establish rapport with children or with those who have great difficulty expressing their feelings verbally. Unfortunately, some clinicians over interpret

SENTENCE COMPLETION TECHNIQUES: Another projective technique involves the use of **sentence completion**. There are many different versions of this technique .The patient is presented (either orally by the examiner or in writing through a questionnaire) a series of sentence fragments. These might include items such as, “When he answered the phone he ” or “Most mothers are .” The patient is asked to give the first response that he or she thinks of and complete the sentence. Again, like projective drawings and the TAT, several scoring systems have been developed to assist in interpretation. However, these scoring approaches are generally used only in research settings; most clinicians prefer to use their own experience and clinical judgment to interpret the themes that emerge from the completed sentences

Clinical Inference and Judgment

Psychological assessment and testing involve much more than administering tests and computing scores. Once a psychologist completes an interview, conducts a behavioral observation, and administers intellectual and personality testing, he or she must pull all the information together and make some important decisions regarding diagnosis and treatment recommendations. All of the information gathered may or may not agree with other data collected. Integrating convergent and divergent information from many different sources requires a great deal of skill, training, and experience (Beutler & Groth-Marnat, 2003). Although clinicians make many efforts to objectify **clinical judgments** by using structured interviews, computer interviewing, objective testing, and input from other highly skilled and experienced professionals, the clinician ultimately uses his or her own judgment, impressions, and experience along with objective data to make decisions. These judgments are not only needed to make sense of all of the data gathered to answer specific clinical questions about psychological functioning, diagnosis, prognosis, and treatment but are also used to decide which instruments and assessment approaches should be administered in the first place. There are many available tests and assessment approaches that can be enlisted to evaluate a person. Choosing the right techniques can often be a complex task.

The quality of clinical judgment can be enhanced by the use of multiple assessment sources (e.g., interview, case history, tests, observations). For instance, if a patient reports feeling depressed, if

many of the stories that the patient tells in response to the TAT include depressive themes, and if the patient's scores on the MMPI-2, the Beck Depression Inventory (BDI), the Symptom Checklist 90-Revised (SCL-90-R), and depression index on the Rorschach are all elevated, it is likely that the clinician will accurately conclude that the patient is indeed depressed. Unfortunately, clinical decisions are not always so clear. For example, a patient may report feeling depressed, but scores on psychological tests measuring depression are not elevated. Alternatively, a patient may deny feeling depressed during the clinical interview, while testing scores indicate that he or she is depressed. Furthermore, depression may be associated with numerous diagnoses. Patients with a variety of medical conditions (e.g., irritable bowel syndrome, cardiac problems, diabetes, chronic pain) may feel depressed. People who experience personality disorders (e.g., antisocial, borderline) may also feel depressed. Depression is often associated with attention deficit disorders, learning disabilities, and other syndromes. Depression can be moderate in severity and chronic (i.e., dysthymia) or severe in intensity and of shorter duration (i.e., major depression). Someone may falsely report being depressed in order to get medical attention (e.g., Munchausen's syndrome) or to obtain some other type of secondary gain (e.g., obtain sympathy and attention from loved ones, staying home from work). Furthermore, many people who are depressed express their feelings through somatic complaints and do not consciously recognize their depression. Numerous factors in the environment may also lead to depression (e.g., loss of job or a loved one). How can the psychologist sort out all the available data and make judgments regarding diagnosis and treatment planning? Psychologists must examine all the pieces of the puzzle and then make sense of them. Their theoretical framework, prior experience, clinical training, and intuitions all come into play. Clinicians do not put all of the data into a formula or computer program and get a fully objective answer to their questions. However, much research suggests that clinical judgments can be unreliable and invalid (Dawes, 1994; D. Faust, 1986; Lilienfeld et al., 2000; Meehl, 1954, 1965; Mischel, 1986; J. Wood et al., 2000)—not only in psychology but in medicine and other fields (Sanchez & Kahn, 1991). Others have criticized this research, stating that these studies are flawed and do not reflect the types of decisions typically made by practicing clinicians (Garb, 1988, 1989; Lambert & Wertheimer, 1988). Efforts are often made to increase the reliability and validity of clinical judgments. For example, many managed care insurance companies require clinicians to use highly specific assessment tools and to objectify target symptoms in psychological evaluations and treatment. Assessment is also encouraged on a regular basis rather than in a single snapshot of a person at the beginning of treatment. Initial formulations and impressions are constantly being challenged based on the discovery of further information. Given the complex nature of psychological assessment, psychologists make case formulations and an initial plan for treatment, for example, that is continually reassessed and revised as the need arises.

TO BE COVERED IN ASSIGNMENT

Chapter Six: Psychotherapeutic Interventions

- 6.1. Goals of psychotherapy
- 6.2. Common denominators in psychotherapy
- 6.3. Stages of psychotherapy
- 6.4. Modes of psychotherapy
- 6.5. Individual psychotherapy
- 6.6. Couples psychotherapy
- 6.7. Family psychotherapy
- 6.8. Non-psychotherapeutic approaches
 - 6.8.1. Biological intervention
 - 6.8.2. Social intervention
- 6.9. Essential questions about psychotherapy