Chapter from Psychiatric Aspects of Criminal Defense
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==CHAPTER 5

Mental Disorders, Tests, and Drugs

For many practitioners, the terms used by psychiatrists and psychologists in formulating their diagnoses of defendants are unfamiliar ones that tend to create confusion when handling a psychological case.

The purpose of this chapter is to provide an overview of the various disorders and terminology used by psychiatrists and psychologists in their reports (and in their testimony), to review the testing procedures employed in the profession, and briefly to discuss the various types of treatment and pharmaceuticals used to treat disorders.

The primary reference used in this chapter is the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, published in 1994 by the American Psychiatric Association. The term DSM and DSM-IV are trademarked terms and are used throughout this chapter where there is a reference to the book. To the extent there is a "bible" in the field of psychology and psychiatry, the DSM is it. Furthermore, DSM-IV is easy to use, comprehensive, and includes the combined efforts of more than a thousand mental health professionals.

The authors of DSM-IV indicate that it is meant for forensic use, although are very careful to note that there may be "significant risks that diagnostic information will be misused or misunderstood ... because of the imperfect fit between the questions of ultimate concern to the law and the information contained in the clinical diagnoses."***1* DSM-IV at xxiii.*** Nevertheless, DSM-IV is widely used and invaluable in forensic situations and should be considered an authoritative text on the subject of mental disorders.

If your expert is still using DSM-III or DSM-III-R (prior versions of the text), be advised that your expert is not using a reference that is considered currently authoritative in the field. Make sure that your expert has reviewed and is familiar with DSM-IV, or your expert will be able to be impeached on cross-examination by an attorney who knows the difference.***2* For

excellent instructions on how to impeach an expert for failure to review the most recent edition of an authoritative text, see Younger, The Advocate's Deskbook: The Essentials of Trying a Case 285–86 (1988).***

§ 5:2 Introduction to psychology and psychiatry

For those of you who never took an introduction to psychology class in college, this chapter will provide you with a working knowledge of the various terms and disorders used in the field. The first distinction to understand is what is the difference between psychology and psychiatry and whether it matters to the attorneys or the court.

Psychology is generally understood to be the science of mental process and behavior, while psychiatry refers primarily to the medical study of diagnosis, treatment, and prevention of mental illness. Psychiatrists are medical doctors whereas psychologists are not.

§ 5:3 Review of mental disorders

The American Psychiatric Association defines a mental disorder 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 cause, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual. Neither deviant behavior (e.g., political, religious, or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of a dysfunction in the individual, as described above.***1* DSM-IV at xxi–xxii.*** As is well established in the

case law and statutes, not all mental disorders are relevant to criminal defense. While a psychotic disorder frequently will provide a defense in a case, borderline personality disorder generally will not. It is important to note the distinction between a disorder, which is met when an individual exhibits the required symptoms of that malady and such symptoms impair that person's ability to function effectively. Thus, while many people may exhibit symptoms of depression, they do not qualify for a diagnosis of depression unless they meet the required criteria of the diagnosis and such symptoms are affecting their ability to function effectively.

In this chapter, the disorders that are included are those which are generally severe enough to constitute a total defense to a crime, a partial defense, or to render an individual incompetent to stand trial. Specifically not included are the following categories: (1) substance-related disorders (since most statutes specifically disallow such a disorder to be used as a defense),***2* There are exceptions to this rule. Where chronic use of drugs and/or alcohol has caused permanent, organic brain damage clearly resulting in permanent psychotic behavior, courts have admitted such evidence to establish an insanity defense. Additionally, there is no prohibition against establishing incompetence resulting from chronic alcohol and/or substance abuse. However, in order for alcohol and/or substance abuse to be relevant in these cases, it must have caused another disorder, such as dementia or schizophrenia. Those disorders are addressed and where the cause may be alcohol and/or substance abuse, it will be noted.*** (2) sexual disorders, such as pedophilia (which are also statutorily disallowed as defenses to crimes), (3) disorders that are not generally severe enough to be defenses or to result in incompetence (personality disorders, adjustment disorders, et cetera), and (4) those disorders which are rarely relevant to criminal cases (eating disorders, sleep disorders et cetera).

§ 5:4 —Special note about substance-abuse disorders

Although substance-abuse disorders tend to be common features in criminal defendant's mental health picture, they are not relevant to criminal defense (or prosecution) unless they result in some other mental health disorder—such as hallucinations, persistent delusions or collateral brain damage and/or an aberrant mental status such as a “black-out”. Additionally, the types and

nuances of the various substance abuse disorders are simply too voluminous to be accurately described in this chapter.

CATEGORIES OF DISORDERS

§ 5:5 Introduction

The categories of disorders that are reviewed in this chapter include the following:

- Schizophrenia
- Psychosis
- Delirium
- Dementia
- Mood Disorders
- Dissociative Disorders
- Mental Retardation
- Posttraumatic Stress Disorder
- Antisocial Personality Disorder
- Miscellaneous Impulse-Control Disorders, including Intermittent Explosive Disorder, Pathological Gambling, Kleptomania, and Pyromania.

§ 5:6 Schizophrenia

Schizophrenia (actually a collection of multiple subtypes of the disorder) is a frequent diagnosis in those individuals with severe mental disorders who have committed crimes. It is a disease diagnosed by observation of a number of behaviors and a pattern of signs and symptoms that are significant and dramatic. Although many lay persons think of a schizophrenic as a person with a so-called "split personality," that is a wholly erroneous description of the illness.

Individuals with schizophrenia are usually very noticeably mentally ill, although they can appear normal at first contact. It is not the type of mental disorder, that if untreated, can remain hidden from associates for an extended period of time. Many (untreated) individuals with schizophrenia are unable to function ably in the outside world. Most individuals with schizophrenia, however, are not violent criminal offenders, either.

§ 5:7 —Symptoms

Schizophrenia is diagnosed as a disease by the presence of several symptoms which must occur together for a certain length of time. An accurate diagnosis of schizophrenia requires that the individual must have the disturbance for at least six months and at least one month of those six must include active symptomology with at least two of the generally recognized symptoms being present. There are two general categories of symptoms, the positive and the negative. "Positive" and "negative" as used here do not have a moral quality—rather they have a qualitative aspect. The term "positive" means an exaggerated form of normal behaviors. For example, rather than normally perceiving events, schizophrenics would have hallucinations. The term "negative" connotes a restriction of the range of an otherwise normal behavior. Thus, rather than exhibiting a normal varied range of emotions, an schizophrenic individual will exhibit flattened or virtually nonexistent emotions.

The positive symptoms are primarily delusions, hallucinations, disorganized thoughts and communication, and disorganized or catatonic behavior. These concepts are defined generally as follows:

§ 5:8 — —Delusion

A delusion is an erroneous belief involving a misinterpretation of perception or experience. These beliefs are not amenable to rational challenge. Delusions are often thematic and often involve such familiar subjects as religion, persecution and grandiosity. Typical delusions include a belief that the CIA is consorting with movie actors to control the banking system of the United States or a belief that the person is the reincarnated Jesus Christ and has special powers beyond most other individuals. Paranoid delusions are the most common type of delusion. Signs and symbols are generally interwoven into these delusions and seemingly innocuous events can take on great significance. The lyrics to songs on the radio, the gestures made by a policeman directing traffic may have special importance to the individual having delusions and the person may believe that the lyrics or gestures are directed at himself.

§ 5:9 — —Hallucinations

Hallucinations consist of hearing voices that are not real or seeing images that are not present. Less commonly, hallucinations can affect the other senses—taste, touch, and smell. Most frequently with schizophrenia, the hallucinations are auditory. Generally, individuals will hear voices (generally more than one) which are not believed to be the person's own voice. Unfortunately for the individual who is hearing such voices, they are most often insulting, evil, or threatening ones. There is little evidence of soothing, gentle voices. Hallucinations, like delusions, are often bizarre and must occur during the period when the individual is fully awake.

§ 5:10 — —Distinction between delusions and hallucinations

Delusions are belief systems gone awry while hallucinations are sensory systems gone awry. Hence, individuals who believe that aliens have planted listening devises in their teeth are having delusions. Individuals who honestly "saw" such an operation are having hallucinations. The presence of both of these symptoms together is common in schizophrenia.

§ 5:11 — —Disorganized thinking and speech

This consists of an inability to keep one's thoughts and speech moving in a comprehensive, continuance and rational fashion. Individuals with schizophrenia either have transitions from one thing to another without any appropriate segue or the speech is so disorganized as to constitute what is commonly referred to as a word salad. The difference between common disorganized speech (as many people engage in, jumping from one thing to another) and schizophrenically disorganized speech is one of degree—schizophrenia is marked by such severely disorganized thoughts and speech as to effectively preclude communication.

§ 5:12 — —Disorganized behavior

Individuals with schizophrenia often act in a variety of ways that are wide-ranging, but generally inappropriate. For example,

they often are unable to attend to their clothing and hygiene, and engage in inappropriate, strange, or unprovoked aggressive behavior. The DSM-IV notes that the behavior must be distinguished from behavior that is merely aimless or from inappropriate behaviors that occur occasionally.

§ 5:13 — —Catatonic motor behaviors

These are behaviors in which the individual either ceases any movement or becomes totally unaware of the external environment. There is sometimes marked stiffness of posture, an unwillingness to be moved from a position and/or the assumption of strange poses.

The "negative" symptoms are generally exhibited by a lack of emotional reaction to stimuli, technically referred to as affective flattening, alogia and avolition.

§ 5:14 — —Affective flattening

This very common symptom is what is generally referred to as the lack of emotional reaction in an individual. The person's face registers very little and there is very little response, eye contact is not maintained and the entire range of emotional response is vastly diminished. It is important that this flattening occur on a persistent basis in various situations to be considered as a symptom of schizophrenia.

§ 5:15 — —Alogia

Defined as a poverty of speech, this behavior is characterized by a decrease in speech, such that the individual answers in brief, hollow relies. Distinct from an unwillingness to communicate, the individual with alogia will continue this lack of speech on a persistent basis over time.

§ 5:16 — —Avolition

Avolition is defined as the lack of volition, or direction. Individuals exhibiting this behavior do not engage in activities that are goal directed and seem unable to engage in normal work or social activities.

The DSM-IV notes that it is important to distinguish between apathy resulting from chronic understimulation from the environment (imagine reviewing IRS returns day after day, week after week) and negative symptoms which exemplify schizophrenia.

It is beyond the scope of this chapter to discuss the length of time and variety of symptoms that must be exhibited together in order to make an accurate diagnosis of schizophrenia. In the event you need additional information, you may wish to refer to DSM-IV, as well as the following references:

•Meyer, The Clinician's Handbook, The Psychopathology of Adulthood and Adolescence (2d ed. 1989).

•Kavanagh, Schizophrenia, An Overview and Practical Handbook (1992).

§ 5:17 Psychosis

Psychosis is a symptom of a disease rather than a disease itself, unlike schizophrenia, which is a recognized disease. Psychosis means that an individual's reality testing ability is impaired.***1* Yudofsky, What You Need to Know About Psychiatric Drugs 158 (1991)(hereinafter Yudofsky, Psychiatric Drugs).*** It is characterized by an inability to fully distinguish reality from mistaken belief or sensation. Thus, individuals in a psychotic state may be schizophrenic, may have a mood disorder (major depression or bipolar disorder) or a brain tumor, may have ingested LSD or other drugs, or have a serious illness.

§ 5:18 Delirium

Delirium and dementia are disorders that have a variety of causes, including Alzheimer's disease, drug/alcohol intoxication, traumatic injury, and illnesses such as HIV or hepatic encephalopathy. Sometimes, there is a mixed etiology—intoxication

and injury. Delirium is an acute onset disorder (e.g.- hours to days), while dementia is usually longstanding.

Generally, these disturbances are characterized by "a clinically significant deficit in cognition or memory that represents a significant change from a previous level of functioning."***1* DSM-IV at 123.*** Dementia and delirium are not interchangeable terms, however, but are separate diagnoses and addressed separately below:

Delirium is a two-part diagnosis involving (1) a disturbance of consciousness along with (2) a change in cognition that cannot be accounted for by a preexisting or evolving dementia. Generally, the disturbance in consciousness is exhibited through a reduced clarity of awareness of the environment. The individual cannot focus well, attention wanders and the individual cannot always answer the right question at the right time.

Additionally, the change in cognition is commonly exhibited as memory impairment, disorientation and language disturbances. The typical patient will have trouble with remembering small sequences of unrelated items, will get confused about what time of day it is, and will often be uncertain as to where they are at the time. It is quite common for sleeping and waking cycles to become confused or totally reversed.

Individuals with delirium may exhibit a variety of emotional disturbances, such as anxiety, irritability, or fear. You may have seen individuals with delirium if you have been to a nursing home. Some of the elderly patients will exhibit typical delirium symptoms—not knowing where they are or who the people around them are, and being intensely anxious or afraid. Additionally, individuals in the hospital with certain medical conditions will also exhibit delirium as exhibited by pulling out intravenous tubes, calling out, muttering, becoming agitated and fearful.

§ 5:19 —Causes for delirium

The causes of delirium tend to be specific: general medical conditions (such as liver disease or excessively high fevers), head injury, medications, substance intoxication or withdrawal, or senility. Sometimes, however, there is an unknown etiology for the delirium.

§ 5:20 —Differences between psychosis and delirium

When individuals are having delirium symptoms with hallucinations and delusions, it is important to distinguish that from other acute and chronic psychotic disorders. Generally, with delirium, the psychotic symptoms (hallucinations, et cetera) will fluctuate, are fragmented and will usually be associated with specific EEG abnormalities. Additionally, with delirium, the underlying etiology mentioned above will be present.

§ 5:21 Dementia

As defined by DSM-IV, it is "the development of multiple cognitive deficits (including memory impairment) that are due to the direct physiological effects of a general medical condition, to the persisting effects of a substance, or to multiple etiologies&hellip4; " Simply stated, there must be memory impairment plus one of the following: disturbance in executive functioning (abstract thought, ability to engage in complex behavior), aphasia (deterioration of speech ability), apraxia (impaired motor skills, without physical cause), agnosia (failure to recognize objects without physical cause). With dementia, unlike delerium, there is no change in the level of consciousness. These symptoms must be severe enough to interfere with the individuals' normal functioning at work and socially and must be a decrease from their normal way of functioning.

The memory impairment is a required element for a diagnosis of dementia and is usually seen prominently as the disease first begins. Either the individual is incapable of learning new information or cannot recall previously known information. Dementia is to be considered when individuals become lost while in familiar places, forget what they went to the store for, leave boiling pots on the stove and forget them. In more severe cases,

the person forgets their occupation, friends and family and occasionally even his name.

§ 5:22 —Causes of dementia

Dementia tends to vary depending on the cause of it. For example, it is defined as "Dementia of the Alzheimer's Type," "Dementia Due to Head Trauma," "Dementia due to HIV Disease," "Substance Induced Persisting Dementia," et cetera. Because of the numerous different etiologies for dementia, it is imperative that other symptoms are recognized and diagnosed accurately. For a detailed discussion of the various types of dementia and their diagnostic features, see the DSM-IV.

§ 5:23 Mood disorders

Mood disorders may or may not be severe enough to play a significant role in criminal cases. For example, depression is a mood disorder, yet it is very rarely the type of disorder that would render a person either legally incompetent or insane. Nevertheless, mood disorders can be severe enough to be involved in criminal jurisprudence and may also be part of a defendant's total diagnosis.

There are three general types of mood disorders which are reviewed in this chapter: mood episodes, major depressive disorder, and bipolar disorders. There are substantial written studies and information available about these types of episodes and disorders as well as several other types of mood disorders. However, this section will only address the three types set forth above and will be limited in scope to major aspects of the disorders.

§ 5:24 —Mood episodes

A mood episode (as opposed to a mood disorder) is generally a function of length of time that the behavior lasts. An episode is a distinct period of time during which certain features are

observed in the individual. The four types of episodes are depressive episode, manic episode, mixed episode, and hypomanic episode.

§ 5:25 — —Major depressive episode

This consists of a period of at least two weeks during which the individual is either depressed or has lost interest or pleasure in most activities. In addition, four of the following symptoms must occur: weight or appetite changes, sleep and psychomotor (handwringing, pulling skin, pacing et cetera) changes, less energy, feeling worthless or guilty, difficulty with cognitive functions, recurrent thoughts of death or suicide, as well as planning or attempting suicide. Additionally, there must be impairment of the individual's life and usually marked feelings of sadness. The preceding symptoms need to occur every day or almost every day. Excluded from these symptoms are the normal bereavement that would follow a death, or depression caused by substance abuse. In men, a mood disorder can be associated more frequently with violence.

In the majority of cases, there is a complete remission of symptoms, although the duration of time may vary. There may be some chronic symptomology that lingers, although not substantial enough to constitute a continued diagnosis of major depressive episode.

§ 5:26 — —Manic episode

A manic episode is characterized by "[a] distinct period of time [lasting at least a week] during which the individual displays an abnormally and persistently elevated, expansive, or irritable mood."***1* DSM-IV at 328.*** Most frequently, the individual displays a "high" mood, although it is so extreme as to become deleterious to the person's effective functioning. Generally, the individual is indiscriminate in who he engages in conversation and is marked by "unceasing and indiscriminate enthusiasm."***2* Id.*** There is often a marked increase in self-esteem, ranging from self-confidence to grandiosity and may include delusional behavior and hallucinations. There is a notable decreased need for sleep and the person speaks in a typically

manic fashion—loud, fast and difficult to interrupt. It is in the nature of a monologue rather than a dialogue. Sometimes, however, individuals will exhibit irritable moods, especially when their wishes are thwarted.

During a manic episode, the individual often goes on buying sprees, sexual sprees, and constant talking jags. Additionally, people with this disorder will often act out of character, engaging in immoral, unethical and/or violent acts and not recognizing the error of such acts. Typically, these individuals do not recognize that they are ill and disdain help or assistance from relatives. These episodes are not caused by medication or substances.

§ 5:27 — —Mixed episode

A mixed episode is when, for a period of at least one week, the individual meets the criteria for both a manic episode and a major depressive episode, with the same criteria and limitations as set forth in those disorders.

§ 5:28 — —Hypomanic episode

This is a period of at least four days in which the person displays an elevated, expansive, or irritable mood. There must also be present at least three additional symptoms listed in criteria for a manic episode. The distinction between hypomanic and manic is one of degree—the necessary period of time is shorter, the symptoms not as marked and disruptive and with hypomania, there can be no delusions or hallucinations.

§ 5:29 —Major depressive disorder

This disorder is characterized by one or more major depressive episodes, without any mixed, manic, or hypomanic episodes occurring with them. These episodes may range from mild to severe and may occur in combination with other disorders, including substance-related disorders, panic disorders, et cetera. Chronic general medical conditions (permanent and/or painful

diseases and conditions) and substance dependence (notably alcohol and cocaine dependence) may contribute to the onset or exacerbation of the disorder.

§ 5:30 —Bipolar disorder

This disorder is characterized by the occurrence of one or more manic episodes or mixed episodes. Additionally, individuals often have a major depressive episode. This disorder is a recurrent disorder in about 90 percent of the cases.***1* DSM-IV refers to Bipolar I and II disorders. The difference between them is generally that Bipolar II involves recurrent major depressive and hypomanic (rather than manic) episodes. Also included in the section on bipolar disorders are Cyclothymia and other disorders which are not included in this text.***

§ 5:31 Dissociative disorders

Dissociative disorders are those mental disorders characterized by a "disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment."***1* DSM-IV at 477.*** These disorders encompass a wide variety of symptoms, generally categorized into four different groups: dissociative amnesia,***2* Formerly referred to as "Psychogenic Amnesia." *** dissociative fugue,***3* Formerly referred to as "Psychogenic Fugue." *** dissociative identity disorder,***4* Formerly referred to as "Multiple Personality Disorder."*** depersonalization disorder, and dissociative disorders not otherwise specified.

§ 5:32 —Dissociative amnesia

Dissociative amnesia is generally defined as "an inability to recall important personal information, usually of a traumatic or stressful nature, that is too extensive to be explained by normal forgetfulness."***1* DSM-IV at 478.*** This disorder has been frequently reported during wars or other horribly traumatic episodes. It is now often referred to in relationship to child sexual abuse which is recalled several years later during some type of therapy.

There is no certain method of distinguishing between this type of amnesia and malingering, although individuals with the disorder tend to score high on standard measures of hypnotizability and dissociative capacity. For the purposes of criminal law practitioners, the following quote from DSM-IV is significant:Care must be exercised in evaluating the accuracy of retrieved memories, because the informants are often highly suggestible. There has been considerable controversy concerning amnesia related to reported physical or sexual abuse, particularly when abuse is alleged to have occurred during early childhood. Some clinicians believe that there has been an underreporting of such events, especially because the victims are often children and perpetrators are inclined to deny or distort their actions. However, other clinicians are concerned that there may be overreporting, particularly given the unreliability of childhood memories . There is currently no method for establishing with certainty the accuracy of such retrieved memories in the absence of corroborative evidence.***2* DSM-IV at 480–81 (emphasis added).***In light of this statement in DSM-IV, courts should seriously examine the admissibility of such evidence and should exercise a great deal of caution in determining whether such evidence should be admissible.**§ 5:33 —Dissociative fugue**

This rather unusual disorder is marked by "sudden, unexpected travel away from home or one's customary place of daily activities, with inability to recall some or all of one's past."***1* DSM-IV at 481.*** The individual is also confused about his personal identity and sometimes even takes on a new identity. The travel may be short-ranging in distance and time to extremely long-range travel. Once the person "comes out" of the fugue, the person may not remember the events that occurred during the fugue. The fugue most often comes about in response to traumatic or overwhelming events.

There is no certain method of distinguishing between this type of amnesia and malingering, although individuals with the disorder tend to score high on standard measures of hypnotizability and dissociative capacity.

§ 5:34 —Dissociative identity disorder

This disorder, formerly (and commonly referred to in the courts as "Multiple Personality Disorder") is diagnosed by "the presence of two or more distinct identities or personality states (Criterion A) that recurrently take control of behavior (Criterion B). There is an inability to recall important personal information, the extent of which is too great to be explained by ordinary forgetfulness (Criterion C). The disturbance is not due to the direct physiological effect of a substance or a general medical condition (Criterion D)."

As readers who saw the movie "Sybil" will understand, the individual with this disorder has more than one (and often several) unique personalities with distinct histories, self-images and names. The identities may emerge in different situations and the more hostile or aggressive personalities may interrupt the others or take over. There is a degree of memory gaps with the more passive personality having larger missing time than the others. In addition to the lost current memories that occur, there may be large missing gaps of childhood memory. The number of distinct identities ranges from two to more than one hundred.

Curiously, those with the disorder have been reported as having distinct physiological functions, including differences in visual acuity, sensitivity to allergens, and response of blood glucose to insulin.

Individuals with this disorder often report severe physical and sexual abuse in childhood. Additionally, they often seem to have abnormal ability to control pain, frequently have repetitive patterns of physically and sexually abusive relationships, and engage in self-mutilation, suicidal, or aggressive behavior.

Like the other dissociative disorders, these individuals tend to score high on hypnotizability and dissociative capacity. Typically physiological symptomology in these individuals are scarring from abuse or self-mutilation, the presence of migraines, irritable bowel syndrome, and asthma.

As with dissociative amnesia, there are those professionals who believe that dissociative identity disorder is being diagnosed much too frequently. However, factors that support a diagnosis would include "the presence of clear-cut dissociative symptomatology with sudden shifts in identity states, reversible amnesia, and high scores on measures of dissociation and hypnotizability in individuals who do not have the characteristic presentations of another mental disorder."

§ 5:35 Mental retardation

Mental retardation is a disorder "characterized by significantly subaverage intellectual functioning (an IQ of approximately 70***1* There is a five-point range of error with IQ tests. DSM-IV at 39. Thus, those individuals with a 70–75 IQ may be retarded if the other factors are present.*** or below) with onset before age eighteen years and concurrent deficits or impairments in adaptive functioning."***2* DSM-IV at 37.***

The "concurrent deficits or impairments in adaptive functioning" include significant limitations in the ability to care for one's self, to live alone, communication skills, social and interpersonal skills, academic work, self-direction, health and safety. To qualify as mentally retarded, at least two symptoms described in this group of deficits must be present.

There are four categories of mental retardation—mild, moderate, severe, and profound and are described as follows:

§ 5:36 —Mild retardation

This category of retardation is the largest, accounting for nearly 85 percent of all individuals with mental retardation. This category includes individuals with IQs in the range of approximately 50–55, who are able to develop skills in the sixth-grade range. During their adult years, they are often able to

achieve skills that enable them to become minimally self-supporting, but often need supervision, guidance and assistance. Individuals can usually live in the community, either independently or in group homes.

§ 5:37 —Moderate retardation

Individuals in this category have an IQ of between 35–40 through 50–55 and constitute approximately 10 percent of all those who have mental retardation. These individuals are able to learn to attend to their own personal care, but are unlikely to go beyond the second-grade range of learning. Usually able to live in the community in a supervised setting, many of these individuals are able to perform unskilled or semi-skilled jobs.

§ 5:38 —Severe mental retardation

Only 3 to 4 percent of individuals who are mentally retarded fall within this category of retardation. They are able to perform limited tasks such as very basic self-care, limited speech, and have the ability to live in group homes or supervised settings.

§ 5:39 —Profound mental retardation

Those with profound mental retardation constitute between 1 to 2 percent of all the individuals with mental retardation and have considerable sensorimotor functioning impairment. These individuals most often need close and continuous supervision and a few are able to perform simple tasks.

§ 5:40 Posttraumatic stress disorder

Notable in criminal cases has been the introduction or attempted introduction of the posttraumatic stress disorder, raised by defense counsel in drug-smuggling cases and raised by prosecutors in rape cases. Additionally, it has been relied upon as a defense when acts were committed during a flashback.***1* See State v. Felde, 422 So. 2d 370 (La. 1982). ***

This disorder (hereinafter PTSD) was first heard of in the courtroom during the 1970s as the "Vietnam Veteran's Syndrome," a form of posttraumatic stress. It was often introduced to explain why veterans engaged in dangerous, high-risk illegal acts, such as flying planeloads of marijuana into the United States under radar levels. Additionally, it was used to explain why veterans often inexplicably begin shooting innocent people—theorizing that such people were having "flashbacks" at the time.

PTSD is characterized as "the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate." ***2* DSM-IV at 424.***

The individual with PTSD must experience either fear, helplessness, or horror following the exposure to the trauma. The individual persistently re-experiences the traumatic evidence, experiences a numbing of general responsiveness, persistently avoids things or places associated with the trauma, and experiences persistent arousal.

General categories of events that may give rise to PTSD are combat scenarios, being raped, tortured, being held captive, severe accidents, or witnessing murders. Occasionally, when a person experiences a "triggering event" (such as hearing a helicopter, if the person was shot down in Vietnam while in one), the individual will experience severe psychological distress including violent acting-out behavior.

Typically, individuals with PTSD make deliberate efforts to avoid discussing the trauma and often become increasingly more

isolated and psychically "numb" from the event. The problems these individuals have include engaging in self-destructive behavior and impulsive risk-taking, to experiencing dissociative symptoms, or feeling permanently damaged and threatened.

There are three types of the disorder: acute (duration is less than three months), chronic (duration is three months or more); and delayed onset (if onset of symptoms occurs at least six months after the stressor).

§ 5:41 Antisocial personality disorder

This disorder (hereinafter ASPD) has become increasingly more common and is perhaps the most troublesome of the various disorders because of the frequency of these characteristics displayed by so many older teenagers and young adults. ASPD is what is most commonly understood as a criminal personality. Individuals with ASPD exhibit "a pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood."***1* DSM-IV at 645.*** Both deceit and manipulation are central features of this disorder, which requires that an individual be at least eighteen years old and have a history of some symptoms of conduct disorder***2* A conduct disorder is defined as "a repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated." The individual engages in one of the four groupings: aggressive conduct harming people or animals; nonaggressive behavior that causes property loss or damage; deceitfulness or theft; or serious violations of rules. DMS-IV at 85.*** before the age of fifteen. Individuals with conduct disorders are often seen acting in violent gang behavior and are frequently classified as delinquent children.

Individuals with ASPD often act impulsively, con others for fun or profit, disregard their own and other's safety, are irritable and aggressive and—most significantly for criminal purposes—lack remorse and are indifferent to the pain or suffering of others.

Not surprisingly, given the lack of empathy these individuals display, coupled with their seemingly cold-hearted actions, courts are generally unsympathetic to diagnoses of this disorder and tend to disregard it as a factor even during sentencing. Not surprising, antisocial personality disorder is a prevalent feature of individuals who are incarcerated for repeated crimes. Of note, recent research suggests a neurophysiological component to this disorder, in the form of diminished frontal lobe brain mass in individuals with ASPD.

§ 5:42 Miscellaneous impulse-control disorders

Impulse-control disorders are sometimes raised as defenses in serious felony cases, although rarely are they considered adequate defenses. However, in states that still have the "irresistible impulse test,"***1* For a state-by-state listing of the insanity defense, see Appendix 1A, infra.*** these disorders may prove to be adequate. When a disorder causes a believably "irresistible" impulse will be the issue in those jurisdictions.

Many times, however, an impulse-control issue will be admissible and relevant at the time of sentencing. For example, in an arson case in which someone was injured, it is unlikely that the judge will admit evidence of pyromania as a defense or even to establish diminished capacity. Such evidence would, however, be more readily admissible at the time of sentencing, should the defendant be found guilty.***2* For a detailed discussion of how to use psychological testimony during the guilt phase and the penalty phase of a criminal trial, see &sects;6:39–6:40, infra.***

Individuals with impulse control disorders generally operate in a familiar pattern. First, there is a growing tension or arousal before engaging in any acts which constitute the disorder (gambling, kleptomania, et cetera). This tension/arousal stage is followed by acting on the impulse—going gambling, setting the fire, et cetera). The commission of the act is followed by relief (dissipation of the tension) and often subsequently followed by

remorse or guilt. This same pattern is sometimes seen with substance abuse disorders.

§ 5:43 —Pathological gambling

This disorder has been raised (both successfully and unsuccessfully) as a defense in a fair number of cases involving theft of money or engaging in illegal enterprise to raise money. The disorder is defined as "a persistent and recurrent maladaptive gambling behavior that disrupts personal, family, or vocational pursuits" and is not a result of manic behavior.***1* DSM-IV at 615.***

Individuals with this disorder are often preoccupied with gambling and spend significant portions of time not just gambling, but planning for and thinking about gambling. There is an excitement that accompanies the gambling for these people and they are unable to control their behavior, despite efforts to limit or stop their gambling. They often try to recoup their losses and engage in such behavior on a consistent basis.

Pathological gamblers often lie to their families and others about the nature and extent of their gambling and are often in dire financial straits due to their behaviors. Pathological gamblers may engage in illegal or emotionally disastrous behavior to obtain money for gambling and have often jeopardized their jobs, family, and friendships for gambling.

Social or professional gambling is distinguishable from pathological gambling in that the latter is characterized by "out of control" behavior—the individual repeatedly makes deleterious choices that adversely affect other significant aspects of his life.

§ 5:44 —Explosive disorder

This disorder is marked by "the occurrence of discrete episodes of failure to resist aggressive impulses that result in serious assaultive acts or destruction of property."***1* DSM-IV at 609-10.*** The degree of the aggressive behavior is much more extreme than the stimulus that provoked such aggression. Like other impulse-control disorders (pathological gambling, kleptomania, et cetera), this disorder is often described as "spells" prior to which the tension or arousal occurs, followed by the aggressive outburst and an ensuing sense of relief. Later guilt or remorse may occur as a result of the behavior.

§ 5:45 —Kleptomania

This disorder is characterized by "the recurrent failure to resist impulses to steal items even though the items are not needed for personal use or for their monetary value. The individual experiences a rising subjective sense of tension before the theft and feels pleasure, gratification, or relief when committing the theft." ***1* DSM-IV at 612.*** These individuals are aware that the theft is wrong and often experience guilt or depression over their acts, but apparently feel somewhat powerless over the compulsion.

Kleptomania is not the same as ordinary theft or shoplifting, which individuals engages in to obtain items of value or worth. Rather, many objects taken by those with kleptomania are not items that the individual really wants or has value. This disorder is not better accounted for by a manic episode or other disorder.

§ 5:46 —Pyromania

This disorder is characterized by "the presence of multiple episodes of deliberate and purposeful fire setting."***1* DSM-IV at 614.*** The individuals experience tension/arousal before setting the fire, fascination or curiosity with fires, and pleasure or gratification during the fire. Pyromania is often found in "fire-watchers" or those who are fascinated with firemen or the like. Individuals with pyromania may be indifferent to the harm they cause by setting fires, but do not set them out of anger, for financial gain, or for political purpose. They are responding solely to an internal compulsion.

TESTING PROCEDURES USED FOR PSYCHOLOGICAL EVALUATIONS

§ 5:47 Generally

There are numerous types of psychological ("pen & paper") and physiological ("brain scans", etc.) testing procedures employed by mental health professionals in their examinations of individuals. The purpose of this section is to briefly review the more psychological common tests used and provide a brief overview for the practitioner to be able to understand how they work and understand how to question an expert about such tests. Physiological tests will be covered below.

The tests that will be reviewed here include the Minnesota Multiphasic Personality Index (MMPI) plus the later version (MMPI-2) and the adolescent version (MMPI-A). Additionally listed, but not described will be other common tests used by clinicians.

§ 5:48 Minnesota multiphasic personality indices

There are three related tests which form the Minnesota Multiphasic Personality Indices: the MMPI-I (the original), the MMPI-2 (which is an updated and revised version of the original) and the MMPI-A (which is a related tests for adolescents). Each of these will be described below briefly.

§ 5:49 —Original MMPI

The MMPI is the most widely used and researched personality test and has been written about in literally thousands of books and articles.***1* Kline, The Handbook of Psychological Testing 458 (1993).*** The test measures fourteen variables (such as paranoia, depression, and schizophrenia), but approximately 200 "scales" have been developed. These scales are categories of measurement that provide a more detailed and specific analysis. For example, there are scales to measure anger, social discomfort,

cynicism, and even addiction proneness. In addition to measuring these types of characteristics, there are scales to measure lying, defensiveness, and exaggeration—all of which are important to an attorney who needs to determine whether the defendant is malingering or exaggerating his mental illness.***2* The MMPI is not a diagnostic test to be used in conjunction with the DSM-IV, but rather is used as an aid in evaluating individuals.***

The original MMPI was developed in the 1930s and 1940s by Starke Hathaway and J.C. McKinley and contained approximately 550 true–false personality questions.***3* Pope, Butcher & Seelen, The MMPI, MMPI-2, and MMPI-A in Court 5 (1993)(hereinafter Pope, MMPI); Meyer, The Clinician's Handbook: The Psychopathology of Adulthood and Adolescence 17 (1989) (hereinafter The Clinician's Handbook).*** The MMPI examines personality, attitudes toward the test and the test-givers, and additionally provides other useful scales to identify or clarify specific problem areas the individual may have.***4* Id.***

The MMPI has been the subject of continued criticism, on the grounds of its lack of relevance and appropriateness as well as for being outdated.***5* Id. at 6. See also Kline, Handbook of Psychological Testing at 460.*** Nevertheless, its ubiquity in the world of psychiatry and psychology has rendered it generally accepted in the field. Additionally, the difficulties that many claim existed in the MMPI have been addressed by the changes in the new, amended test, the MMPI-2, which was introduced in 1989.

§ 5:50 —MMPI-2

The new MMPI-2 consists of approximately 700 questions which are more contemporary and less sexist than its predecessor. There are nearly 25 percent more questions and there are several new symptom-oriented scales, such as depression and bizarre mentation.***1* Pope, MMPI at 6.*** In addition to the expanded scales for symptoms, other scales were developed to address more clinically based problems, such as negative treatment indicators.***2* Id.***

§ 5:51 —MMPI-A

The MMPI-A is a variation of the MMPI and MMPI-2 for use with adolescents between the ages of fourteen and eighteen. There are several distinctions between the "adult" versions and the adolescent version. Among the differences are that the MMPI-A is about 250 questions shorter than the MMPI-2, has a section that relates only to adolescent problems, and scores the test results by comparison only to adolescent averages—not adult averages.***1* Pope, MMPI at 7.*** The MMPI-A also has specific scales geared toward adolescents, as well. Thus, there are scales to measure conduct disorders and other problems not seen in adults.

In the event the defendant is an individual between the ages of fourteen and eighteen, it is important that the testing psychiatrist or psychologist have used the MMPI-A and not the adult version. If there is some reason that your expert used the adult version (perhaps the longer version would be the only accurate method of measuring certain disorders), be certain that your expert can rationally and convincingly explain the reason for using the adult test.

In the event the other side used the adult test, you will be able to ask helpful impeachment questions on cross-examination.

§ 5:52 —Checklist for using the MMPIs in the courtroom

This book is much too short to accurately explain the MMPIs. The tests are much too inclusive and detailed to be thoroughly understood here. Nevertheless, the following outline will give you a basis for questions to ask. Generally, assuming your expert will rely on the MMPI, you need to focus on the following areas during direct examination:

What is the MMPI? How authoritative is it? Studies that support that view?How is it administered? Did you administer/oversee the test in this case? What does the test measure? How does the test measure such matters? What doesn't the test measure? Review the findings of the defendant's test. How did you rule out the possibility that the defendant was faking? Are there specific ways

built into the test to determine that the witness is lying, being secretive, or manipulative?

If you are going to rely heavily on the MMPI or believe that the opposing counsel will rely on the test, be sure to review in detail Pope, Butcher and Seelen, The MMPI, MMPI-2, and MMPI-A in Court (1993). It was published by the American Psychological Association and is useful for clearly understanding the test. Additionally and most helpfully, the book contains eighty sample questions to use when examining the experts and provides an entire chapter on how to assess malingering and other aspects of credibility.

§ 5:53 Other tests used by psychiatrists and psychologists

The other well-known tests used by psychiatrists and psychologists are the tests known as the Rorschach test, the 16 PF test, the WAIS-R tests, and the SCID, a structured diagnostic instrument.***1* Meyer, The Clinician's Handbook 5 (2d ed. 1989).***

DRUG THERAPY FOR INDIVIDUALS WITH MENTAL DISORDERS

§ 5:54 Generally

When individuals have substantial mental disorders, such as schizophrenia and bipolar disorders, they are often prescribed pharmaceuticals to treat such disorders. The administration of certain drugs has become a major issue in cases where the drugs change the essential nature of the defendant. For example, in Riggins v. Nevada,***1* Riggins v. Nevada, 504 U.S. 127 (1992).*** the United States Supreme Court held that the defendant had a right to stand trial without antipsychotic drugs being forcefully administered when the defendant was relying upon the insanity defense for the crime charged. Since the effect of the drug was so profound on the defendant's demeanor, the Court found that the defendant was entitled to have the jury see him in an unmedicated state, as he was at the time of the crime.***2* The issue of forced medication for purposes of competency is addressed in Chapter 4.***

In the event that you have a case involving psychological issues and the defendant (or a witness, for that matter) is taking substantial medication for psychosis or bipolar disorders, it is important to be familiar with the names of the drugs and their effects. If you are reviewing medical records of your client, for example, and notice that your client takes Haldol, you would immediately realize that the client may be psychotic. This book only refers to those drugs used in major mental disorders such as psychosis and major mood disorders. Accordingly, only drugs used to treat those disorders are included. They are grouped by their function: antipsychotic medication; antidepressants; and antimanic drugs.

Generally, if you are reviewing medical records or pharmaceutical records without the help of an expert, consider using the PDR or a layperson's guide to drugs for help in understanding what drugs are being used and their effects and side effects.***3* The book most frequently relied upon in this chapter is Yudofsky, Hales & Ferguson, What You Need to Know About Psychiatric Drugs (1991).***

§ 5:55 Antipsychotic medication

Schizophrenia and related psychoses are extremely disabling mental disorders that appear in roughly one percent of the general population, although they account for approximately 40 percent of all hospitalized psychiatric patients.***1* Leonard, Fundamentals of Psychopharmacology 123 (1992).***

Many individuals who have schizophrenia or exhibit other psychotic behavior are treated with antipsychotic medication. The differences among the various medications are substantial and it is far beyond the scope of this book to discuss the differences. However, antipsychotic drugs are generally divided into low, medium, and high potency categories. The higher the potency, the more likely the negative side effects (which are discussed later in this section).

Generally, psychotic behavior is believed to result partly from an excess of dopamine in the brain or an increased sensitivity of the dopamine receptors. Antipsychotic drugs are believed to prevent dopamine from binding to dopamine receptors in the brain.***2* Yudofsky, Psychiatric Drugs at 177.*** Obviously, this explanation is a greatly simplified explanation, yet it suffices for an overview purpose.***3* For a more sophisticated and accurate explanation, see Leonard, Fundamentals of Psychopharmacology, 123–43 (1992).***

The side effects of antipsychotic drugs that are the most worrisome are what are referred to as the "extrapyramidal" ones: such as stiffening or twisting of facial and other body muscles (dystonic reactions); symptoms that mimic Parkinson's disease, such as loss of facial expression, drooling, tremors or shaking and slow movement; agitation and restlessness, and tardive dyskinesia, the involuntary movements that can affect facial and other muscles and can become progressively worse and also irreversible, and “akathisia” or intense restlessness.***4* Crammer & Heine, The Use of Drugs in Psychiatry, 82–83 (3d ed 1991); Yudofsky, Psychiatric Drugs 182, 185–88, 196.***

The more common drugs for psychosis include the following:***5* Description of the drugs found in this chapter are taken from Yudofsky, Psychiatric Drugs, and Arana & Hyman, Handbook of Psychiatric Drug Therapy (1991).***

•Chlorpromazine: (Thorazine). This drug is a low-potency antipsychotic and has a sedative effect as well as an antipsychotic effect.

•Haloperidol: (Haldol). This drug is a high-potency antipsychotic which has a high risk for extrapyramidal symptoms.

•Thioridazine HCI: (Mellaril). This is a low potency antipsychotic with a highly sedative effect.

•Clozapine: (Clozaril). This is an intermediate potency antipsychotic which carries a risk of seizures and a risk of agranulocytosis, which decreases white blood cells.

Newer agents such as Risperidone (Risperdal) and other so-called “atypipical antipsychotics” have a superior side-effect profile to the above, and are rapidly becoming first line antipsychotic agents.

§ 5:56 Drugs for mood disorders

There are two large categories of drugs for mood disorders: antidepressants and antimanic drugs. The antidepressant drugs are prescribed to alleviate symptoms associated with depressive disorders. The antimanic drugs are generally administered to individuals who exhibit bipolar disorders and manic disorders.

§ 5:57 —Antidepressant drugs

Although there are several antidepressant drugs that are available for depression and that work in different ways, most individuals are most familiar with a new drug, tradename Prozac.

There are few categories of antidepressants which are commonly described: (1) heterocyclics, which work by inhibiting the nerve cells' ability to reabsorb certain neurotransmitter drugs in the brain; (2) monoamine oxidase inhibitors (MAOIs), which prevent an enzyme (monoamine oxidase) from breaking down certain neurotransmitters; and (3) serotonin-specific drugs, which work by limiting the re-uptake of serotonin (a neurotransmitter) in the brain.***1* Yudofsky, Psychiatric Drugs at 42–48.*** Prozac is a member of this last family of drugs.

The more common anti-depressants are the following:
•Amitriptyline: (Elavil). A heterocyclic.
•Imipramine: (Tofranil). A heterocyclic.
•Fluoxetine: (Prozac, others). A serotonin-specific drug.
•Isocarboxazid: (Marplan). A MOA inhibitor.
•Phenalzine: (Nardil). A MAO inhibitor.

§ 5:58 —Antimanic drugs

The antimanic drugs are given to individuals who either have manic episodes or who have bipolar disorders. There are two types of drugs frequently given to the individuals with these disorders: Lithium and Carbamazepine.

§ 5:59 — —Lithium

This drug is most commonly given to individuals with manic or bipolar disorder. It works to level out the manic episodes and is often taken daily as a prophalaxis to having continued episodes. Lithium is given to individuals who have either episodes of mania or episodes of both mania and depression. It does not work immediately, but usually takes about a week or so before a noticeable effect is reached.***1* Crammer & Heine, The Use of Drugs in Psychiatry ch. 20 (3d ed. 1991); Yudofsky, Psychiatric Drugs at 136.***

§ 5:60 — —Carbamazepine, Valproic Acid, Lamotrigine

These drugs are useful in the treatment of mania (and for Lamotrigine, also depression) and are used with individuals who have frequent bouts of mania or who do not respond to treatment with lithium. Sometimes, both lithium and one of these drugs are given in conjunction with antidepressants or other drugs.***1* Yudofsky, Psychiatric Drugs at 136, 137.***

----------NEW-LFB's section----------

Quantifying the Cognitive Aspects of Mental Illness In the Forensic patient

This section will discuss those neurophysiological (e.g.-physical tests) and neuropsychological measurements that are often used by mental health professionals to assess and measure an individual's overall cognitive function, particularly in the realm of the capacity to form specific criminal intent.

An Overview of Functional Neuroanatomy

The brain is divided into two specific anatomic regions, the cortex and the brain stem. While the brain stem can be important in regards to behavioral and cognitive abnormalities, this section will concentrate on the role of the cortex in cognition. The cortex is divided into four regions: the frontal lobes, the temporal lobes, the occipital lobe, and the parietal lobes. The frontal and temporal lobes of the brain are involved in (amongst other cognitive functions) premeditation, deliberation, and the formation of specific intent (both as regards critical and non-critical decision-making). Specific abnormalities of these brain regions can result in cognitive abnormalities that may be important to a psychiatric defense. There are a variety of ways

to assess frontotemporal cortical brain functioning, and these are discussed below.

In addition, many medical conditions (e.g. brain injury, seizure disorder, cancer, dementia, etc.) can be associated with specific abnormalities of the frontal and/or temporal lobes. When assessing your client for psychiatric disease, it is important to have an expert screen for pre-existing neurologic disorders, which may affect frontal or temporal lobe functioning.

The Limitations of DSM IV in the Forensic Setting

While the DSM-IV is a nosological document that seeks to categorize and subdivide mental illness by common characteristics, the forensic aspects of mental illness are in fact dimensional characterizations of cognition (at it's essence, cognition is defined as an individual's ability to think logically). Thus the legal definitions of an abnormal cognitive state do not correlate to any particular DSM IV diagnosis. That is to say that the law is often interested in cognitive concepts such as "insanity", "diminished capacity", and the like; which are really descriptions of a particular cognitive state, but are not medical diagnostic terms. Underlying these legal constructs is a specific definition of "cognition", This is either the ability of an individual to premeditate, deliberate, and form specific criminal intent (as pertains to homicide), or the cognitive capacity of an individual to understand and interact with others (as pertains to informed consent, aiding in one's own defense, etc.). While all of the DSM-IV mental illnesses discussed above can adversely affect on "cognition", it is important to understand that the measurement of "cognition" from a forensic standpoint (and also from a neuropsychological and neurophysiological standpoint) exists separate and apart from an specific DSM-IV diagnosis.

Neuropsychological and Medical Cognitive Testing

Neuropsychological testing is generally not performed by all psychologists, but is administered by a subset of Ph.D. degreed psychologists termed neuropsychologists. Neuropsychologists have specific training in the administration and interpretation of specific cognitive assesment test batteries. In addition, thorough neuropsychological testing has built into it paradigms to assess for the presence of symptom amplification or malingering for secondary gain, important issues when presenting a psychiatric defense. While the nuances and subtleties of neuropsychological

testing are beyond the pall of this particular document, there are other authoritative texts[1] to which the reader is referred.

Neuropsychological assesment is generally composed of a battery of tests administered to an individual that measure against statistical norms that person's ability to "think". A neuropsychologist generally administers a battery of 10 - 12 tests that specifically key on certain domains of cognition, such as attention, concentration, short-term memory, information processing speed, visual memory, visual recall, executive functioning and the like. The neuropsychologist then synthesizes this information in the form of a report that seeks to *dimensionally* categorize the presence or absence of specific cognitive deficits in an individual and the degree of impairment present in each of these cognitive domains.

It is important to note that cognitive deficits can exist across the spectrum of psychiatric and neuropsychiatric disease, such that individuals with schizophrenia, mood disorders, dementia, delirium, and other neuropsychiatric disorders will all to a greater or lesser extent exhibit cognitive deficiencies on neuropsychological testing. In addition, many of the medications used to treat psychiatrically impaired individuals can cause cognitive deficits of their own. Finally, acute and chronic drug and alcohol abuse can also result in demonstrable cognitive deficits on this type of testing. Thus neuropsychological assessment can statistically categorize the presence and severity of key cognitive deficits in a criminal defendant, and in many instances is neccesary to demonstrate to the court and/or a jury the presence and "cognitive" severity of the psychiatric illness at issue.

Medical and neurophysiological testing

In addition to neuropsychological testing, cognitive abnormalities can be demonstrated through neurophysiological testing. These physical tests of actual brain anatomy and function include:

1. The use of static testing, such as CAT scans (CT) and Magnetic Resonance Imageing (MRI) to look for anatomic brain abnormalities (atrophy, injury, stroke, brain malformation, etc.).

[1] Neuropsychology for Clinical Practice, Adams, RL, Parsons, OA, Culbertson,JL, Nixon,SJ, 1996, American

2. The use of neurophysiological testing including Electroencephalography[2], brain stem and visual evoked responses[3], and P-300 neurophysiological testing to demonstrate brain electrical conduction (e.g.- "wiring") abnormalities.
3. The use of dynamic neuroimaging, such as Positron Emission Tomography (PET) or Single Photon Emission Romography (SPECT) scanning, to delineate metabolic or blood flow abnormalities in specific regions of the brain associated with a specific cognitive deficiency[4].

Again, these tests are dimensional in nature and will detect appropriate abnormalities in many of the psychiatric disorders noted above. These types of tests are useful adjuncts in characterizing the presence and cognitive severity of the various psychiatric diseases discussed above. If any one test is used alone to “prove” a specific psychiatric defense, this over-reliance on a single medical technology may be subject to a Daubert hearing.

Finally, there are a variety of common medical conditions that can cause or augment specific cognitive abnormalities in both psychiatrically ill and psychiatrically well individuals. These would include:

1. The cognitive/brain effects of chronic heart and vascular disease.
2. The cognitive/brain effects of endocrine disorders, such as diabetes and thyroid disease.
3. The cognitive/brain effects of autoimmune disorders, such as systemic lupus erythematosus.

Psychological Association, Washington, DC
[2] reference #2
[3] reference #3.

4. The cognitive/brain effects of specific non-psychiatric medications.
5. The cognitive/brain effects of neurotoxins (eg-lead, solvents, etc.).
6. The cognitive/brain effects of other non-psychiatric medical conditions (eg- cancer, HIV, etc).

Again, there are literally thousands of medical, toxicological and medication-related cognitive effects that can impinge on both "psychiatrically ill" and "psychiatrically well" individuals, and may have pertinent ramifications in demonstrating cognitive abnormalities in specific criminal defendants. However the scope of this discussion is so broad, that it cannot possibly be encompassed in this text.

In summary, the comprehensive dimensional assessment of a criminal defendant's cognitive status should include not only the rendering of the DSM-IV diagnosis and an appropriate report by an expert, but should also include the judicious use of neuropsychological and neurophysiological testing (and, where appropriate, medical testing) to buttress these conclusions.

The expert's report and the dimensional assessment of Cognition

When engaging a mental health expert to evaluate a client, you should ask the expert the following questions:

1. Does the patient have a medical/neurological condition that could affect cognitive functioning?
2. Does the patient take any medications that could affect cognitive functioning?
3. Does the patient have a history of toxin exposure that could affect cognitive functioning?

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[4] Reference #4

4. Have you done, or will you refer the patient for cognitive testing by a bonafide neuropsychologist?
5. Have you done, or will you refer the patient for neuroimaging and/or neurophysiologic testing to demonstrate brain physiologic abnormalities?
6. Have you requested the patient's past medical records and/or ordered current medical tests to evaluate for non-psychiatric disease related causes for any cognitive abnormalities?

Not every defendant will require all of these tests, and none of these tests can stand alone as "proof" of a particular type of cognitive deficit. However, this type of ancillary testing is reflective of the modern age of mental health, and should be part of any comprehensive psychological/psychiatric evaluation of a mentally ill defendant.