

7-8 Pattern

Clinical Scale Elevations

Scale(s) 7 (Pt)

T-score 60-69

Elevations on the present Scale(s), taking race, gender, age, education, marital and employment status into consideration for the corresponding group's data, indicate any or all of these clinical features could be present in this person's behavior and history:

They have a low threshold for anxiety. They are methodical, punctual, and organized. They are productive, hard working persons. They are sensitive to the moods and feelings of others. They do not wish to give offense. They follow the rules. They drive at or very near the speed limit. They may not be particularly original in their approach to problems, but once they have mastered a task, they perform it without errors or complaints. They prefer routine, changeless futures, and the predictable. They have a high tolerance for boredom.

Scale(s) 7 (Pt)

T-score 70-84

They are dissatisfied with their social relationships. 2. They are not confident about what to expect from others much less themselves. They are rigid, habit bound, and self-critical. They cannot stop themselves from thinking unpleasant and frightening thoughts. They sweat the small things. They often overlook the most important parts of the "Big Picture." They often overlook salient features of a problem or social situation. They can feel "dumb" when they realize what they had missed or left out. They are meticulous about their work and person. They drive themselves hard to reach personally important goals. They are unusually persistent. Their rigid approach to life may intensify should they become ill, suffer accidents or injuries.

Scale(s) 7 (Pt)

T-score \$ 85

They ruminate about their problems. They mentally go over and over their problems, but rarely find satisfactory solutions for them. They feel miserable most of the time. They suffer from chronic tension. They sometimes find themselves so tied up in their own thoughts that they cannot make decisions or attend adequately to everyday duties. They bear a heavy sense of responsibility, which is not called for by the objective facts of the situations in which they find themselves. They get little to no joy or satisfaction out of life. They are long suffering, as are their partners. They are not considered "The Life of the Party." They find it hard to laugh. Life is too serious for them to bear the thought of

anything racy, erotic, or improper. They are good, if not, inspiring neighbors. They are dependable. Their sense of morality demands exceptionally high standards, for both themselves and others. They are straight laced. Most people would probably not want to go to lunch with them, unless job or social demands required it. They freeze when suddenly confronted with off colored jokes. They panic when faced with an insensitive “move” is placed upon them.

Psychasthenia

Pierre Janet, (1903) defined psychasthenia as “...the lack of psychological strength associated with a narrowing of consciousness. (Ellenberger 1970), p. 375.

Ellenberger, H. F., (1970). *The Discovery of the Unconscious: the history and evolution of dynamic psychiatry*. New York: Basic Books, Inc., Publishers.

Janet distinguishes “...two types of psychasthenia crises, fits of anxiety, and all kinds of conspicuous manifestations related to fixed ideas”. “...Those fixed ideas were conscious in the form of obsessions and phobias”. (Ellenberger, 1970) p. 376.

Janet (1930) wrote, “In my description of the symptoms of the psychasthenic neurosis (Janet 1903), I stressed particularly the pathological feelings (*sentiments pathologiques*), which I designated at the time as feelings of inadequacy (*sentiments d'incomplétude*) and which have become in my last book a part of the feelings of emptiness (*sentiments du vide*)”. Janet includes the symptom of “...the maladies of doubt”.

Janet, P., (1903). *Les obsessions et la psychasthenia*, 2 volumes (Paris: Alcan. Vol. I by Pierre Janet, Vol. II by F. Raymond, and P. Janet.

Neurotic disorders were the preferred designation of all anxiety related mental disorders prior to the development of the Diagnostic and Statistical Manuals classifications, which now lists them as anxiety disorders. The DSM-IV-TR (2000) classifies anxiety disorders into nine categories.

Panic Disorder is the recurrent episodes of panic attacks. At least one month (or more) has followed one of the attacks of the following: Persistent concern about having additional attacks. Worry about the consequences of an attack, i.e., “I’m going crazy”, having a heart attack, and loosing self-control. Significant changes in behavior are feared. Panic disorder with and without agoraphobia and additional diagnoses with panic disorder is also a possible diagnosis.

Phobic Disorder is an irrational fear of an object or situation that persists although the person recognizes the fear is irrational. These specific phobias are **Agoraphobia**, the fear of being alone in an open or public area where escape

might be difficult. The person is often terrified of leaving their home or residence; **Social Phobia**, the fear of situations where one might be seen and embarrassed or criticized. Speaking to person in authority, speaking in public or performing before an audience are avoided; **Specific Phobia**, a fear of a specific object, activity, or situation, i.e., fear of flying (Jong's Syndrome), snakes, mice, and closed places, amongst others.

Common Phobias

Feared Object Or Situation	Clinical Name
Animal	Zoophobia
Being Alone	Monophobia
Blood	Hematophobia
Closed Places	Claustrophobia
Darkness	Nyctophobia
Electrical Storms	Astrophobia
Fire	Pyrophobia
Germs/Dirt	Mysophobia
Heights	Acrophobia
Open Spaces	Agoraphobia
Strangers	Xenophobia
Talking	Glossophobia
Water	Hydrophobia

Obsessive-Compulsive Disorder (OCD) defines a preoccupation with persistent intrusive thoughts, impulses, or images. **Compulsions** are repetitive behaviors or mental acts that the person feels driven to perform in order to reduce distress or prevent a dreaded event or situation.

The person knows the obsessions/compulsions are excessive and unreasonable. The obsession/compulsion is time consuming and can cause distress.

Generalized Anxiety Disorder (GAD) is defined as excessive worry and anxiety more days than not over a period of the preceding six months. The person cannot control their worrying. The anxiety and worry is associated with three or more of these six symptoms: Restlessness, feeling keyed-up, easy fatigue ability, difficulty concentrating, irritability, muscular tension, and sleep disturbances. The anxiety and worry as well as physical symptoms, which follow on the anxiety and worry cause significant impairment in other areas of important functioning.

Clinical Presentation of Anxiety Disorders

Panic Disorder: A panic attack is the sudden appearance of intense fear or dread, which may announce impending doom. Terror paralyzes its victim. Terror shakes the individual's hold on the elements of reality. They can neither see, nor think clearly. They may think they are losing their minds. Physical sensations including palpitations, chest pain, suffocation, nausea, chills and hot flashes erupt unexpectedly. The abrupt onset of these attacks last a number of minutes and then subsides.

Panic Disorder and Agoraphobia characterizes recurring panic attacks, which combine with agoraphobia.

Phobias are persistent, irrational fears of specific objects or situations, which an individual avoids. High levels of anxiety and distress arise from contact with objects or situations, which most people find innocuous, i.e., the sight of blood, looking down from heights, thunder and lightning, viewing open expanses over water, enclosed spaces, among many others.

Social Phobias involve fear and anxiety arising from engagement in social situations or situations in which a performance is expected of the person. Afflicted persons fear they will say something foolish, which would expose them to ridicule or shame; not being able to answer a simple question, which would reveal they are stupid; forgetting their lines or saying them wrong in a play would expose them as inept are examples of social phobias. Fear of speaking in public is a common social fear. The life of persons living with social phobias becomes more and more constricted as they avoid more and more objects and situations which cause them to be paralyzed with fear. Alcohol and drugs reduce the distress they experience.

Obsessive-Compulsive Disorder: Obsessions are experienced as thoughts or images that keep recurring without let-up. They are meaningless in and of themselves. They occur within a matrix of persistent intense anxiety.

Compulsions are procedures adopted and followed rigorously, to control the experience of anxiety and reduce the intensity of the anxiety. These procedures lead to temporary relief. A tune repeated repeatedly in one's head is such an example. Repeated questioning such as, "Did I turn off the stove , " "Did I turn off the lights", " Did I lock the door?" drive the person to check their activities many times over and often lead to self-dissatisfaction. Crippling doubts centering on violence, illness or death, contamination, and sexuality cause the individual to feel humiliated, shamed, and disgusted with them. The demand-performances, procedures, and rituals involved in compulsions interfere with accomplishing necessary everyday activities and the fulfillment of obligations to other people.

Generalized Anxiety Disorder is overweening worry and anxiety, which has persisted over the foregoing six months and is present along with sleeplessness, tension, irritability, poor concentration, tiredness, and fidgeting. The person worries about letting people down, not being able to earn enough money, illness with family members, doing poorly at work with a fear of being fired, and feeling they are not up to the task of effective living. They spend their nights going over the day's failures, seeking means to make things come out right and solving problems in their heads. They continuously review past mistakes, problems and fret over future developments. They fear making mistakes of even the simplest sorts. They view their own decisions as inadequate and problematical.

Posttraumatic Stress Disorder is intense fear, helplessness, and terror associated with the repeatedly re-experiencing memories of traumatic events where threatened or actual injury or death has occurred. Intrusive recall of these events in flashbacks, dreams, or incidental everyday experiences bring the recollected trauma backs to life in full force. The person refrains from reawakening memories of the trauma.

Feelings of emptiness, the loss of the capacity to respond emotionally, being distant and unavailable to others, the incapacity to connect and a hopeless sense of detachment lead to the conviction life must be lived in a vacuous isolation. Exaggerated startle responses, an all-pervasive guardedness, heightened vigilance, and a sense of an irremediable loss and death of essential portions of their emotional lives form barriers to full and productive lives. Self-medication, chemical abuse, re-fighting the traumas in real time with real people, as well as physical abuse of family members, and brushes with the law complicate social, economic, and civic behaviors.

Acute Stress Disorder is the reaction to an immediate stressor, which abates when the issues involved in causing the stress cease.

The DSM-IV-TR (2000) lists a mixed anxiety-depressive disorder wherein a dysphoric mood has lasted for a least one month; the dysphoric mood is associated with four or more of the following symptoms (The Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition, Test-Revised, 2000).

Difficulty concentrating, the mind goes blank, difficulty falling asleep or staying asleep or unsatisfying sleep, fatigue and low energy, irritability, worry, easily moved to tears, heightened vigilance, anticipating the worst, catastrophizing, hopelessness, all encompassing pessimism, a bleak outlook on the future, low self-esteem and a sense of being worthless. Additional comorbid disorders include substance abuse, Somatization, and physical disorders.

Anxiety Disorders	Base Rates	
Comorbid		
Diagnoses		
Generalized Anxiety Disorder	4-5	Agoraphobia Major Depression Panic Disorder Somatoform Disorder
Panic Disorder	1-3.5	Agoraphobia
		Major Depression
Phobias		
Major Depression	21.3%	Agoraphobia
2.8-5.3%		Anxiety Disorder Alcohol and Substance Abuse
Social Phobia	7.9-13	
Alcohol and Substance Abuse		Abuse
Obsessive-Compulsive Disorder	2-2.5	
Major Depressions		Panic Disorder Phobias
Posttraumatic Stress Disorder	1.0	General Population

Panic Attacks
Substance Abuse
Depression
Somatization

(Welkowitz, et al., 2000, and Horwitz and Weissman 2000).

Welkowitz, L. A., Strvening, E. L., Pittman, J., Guardino, M., and Welkowitz, J., (2000). "Obsessive-compulsive disorder and comorbid anxiety problems in a national anxiety-screening sample". *Journal of Anxiety Disorders*, 14(5): 471-482.

Horwitz, E., and Weissman, N. M., (2000). "The epidemiology and cross-national presentation of obsessive-compulsive disorder". *Psychiatric Clinics of North America* 23(3): 493-507.

Tellegen, et al., (2003) created the MMPI-2 Restructured Clinical (RC) Scales as a response to the need to clarify the saturation of the MMPI scales with a common, emotionally saturated factor, which can be broadly specified as generalized anxiety. This emotional factor colors all emotional life. The negative manifestations are termed Demoralization.

This Demoralization Scale is composed of only 24 items drawn from clinical Scale 2 (Depression) and Scale 7 (Psychasthenia). The Demoralization Scale reflects overall emotional discomfort, which combines feelings of demoralization, discouragement, insecurity, pessimism, and poor self-esteem. A sense of failure pervades a person's evaluations of their life's achievements. The individual feels helpless, overwhelmed, and unable to make things turn out satisfactorily.

The RC factor corresponds well with Janet's descriptions of his patients who suffered from Psychasthenia. Statistical confirmation of a century old clinical phenomenon is a hopeful sign.

Tellegen, A., Ben-Porath, Y. S., McNulty, J. L., Arbisi, P. A., Graham, J. R., and Kaemmer, B., (2003). "The MMPI-2 Restructured Clinical Scales: Development, validation, and interpretation". Minneapolis, MN: University of Minnesota Press.

Scale 7 (Pt) has 47 items in both the MMPI and MMPI-2. Thirty-nine items are scored in the true direction and nine are scored in the false direction. A K correction multiplier of 1.0 is added to the Scale 7 (Pt) raw score. Item overlap is: **L (0), F (1), K (2), 1 (2), 2 (13), 3 (7), 4 (6), 5 (1), 6 (4), 8 (17), 9 (3), Sie (9)**.

Scale 7 (Pt) and Scale 8 (Sc) have many items in common. Elevations on Scale 7 (Pt) will raise the score and Scale 8 (Sc). High scores may measure any of a variety of subjective difficulties ranging from concentration problems to frank psychoses (Comrey 1958). Test-retest correlations on Scale 7 (Pt) range from 0.83 to 0.86 in a 1 to 2 day interval for psychiatric patients and from 0.49 to 0.58 for a one year interval, also for psychiatric patients (Dahlstrom et al. 1975).

Butcher et al. (1989) reported similar results with the MMPI-2 with normals for intervals of 1 to 2 days.

Comrey, A. L., (1958). "A factor analysis of items on the MMPI Psychasthenia scale". *Educational and Psychological Measurement* 18, 293-300.

Dahlstrom, W. G., Welsh, G. S., & Dahlstrom, L. E., (1975). "An MMPI Handbook: Vol. II. Research applications" (Rev. ed.). Minneapolis: University of Minnesota Press.

Butcher, J. N., Dahlstrom, W. G., Graham, J. R., Tellegen, A., & Kaemmer, B., (1989). "Minnesota Multiphasic Personality Inventory-2 (MMPI-2): Manual for administration and scoring". Minneapolis: University of Minnesota Press.

Clinical Scale Elevations

Scale(s) 8 (Sc)

T-score ≥ 75

Elevations on the present Scale(s), taking race, gender, age, education, marital and employment status into consideration for the corresponding group's data indicate any or all of these clinical features could be present in this person's behavior and history:

They get little satisfaction from the company of others. They prefer to live in a fantasy world of their own creation. Fantasy provides them with the satisfactions they cannot get from living in a world most people occupy. Their thinking can be original, but when expressed makes others just a little uncomfortable. They find it hard to get people to understand them. Their thinking rapidly becomes disorganized and fragmented when they find themselves under pressure to perform tasks, which they find, are beyond their ability to deal with effectively. They exist with a compromised capacity to meet social and economic demands. They live isolated, lonely lives. They find solace and comfort in alcohol and drugs of pleasure.

Schizophrenia

Wallace (2001) describes schizophrenic disturbances' most prominent feature as incoherent, illogical, or inappropriate abstract thinking. Incoherent thinking involves a disruption in the sequence of thoughts so that one thought does not flow continuously and coherently from another. They lose track of what they are saying. They may express a series of loosely related ideas that is difficult to follow.

Wallace, J. L., (2001). "A Clinicians Guide to Minnesota Multiphasic Personality Inventory Interpretation". Ex Libris.

Persons suffering from schizophrenia report they feel misunderstood, punished for no reason they can remember, and plotted against by persons who do not have their best interests at heart. They pull back from any person or situation they see as challenging them personally. They have few or no friends. Their social skills are not well developed. They relate in a clumsy and rigid way to others. They have little flexibility responding to others wishes, needs, or expectations. They are easily frightened. Nichols and Greene, (1995) note the schizophrenics' emotional disengagement reveals, "...pathological disengagement from life that discounts future interests, prospects, and engagement to the extent that they can no longer serve as incentives for continuing to live" (p. 29).

Nichols, D. S., & Greene, R. L., (1995). MMPI-2 structural summary: Interpretive manual. Odessa, FL.: Psychological Assessment Resources.

Schizophrenics tell of their difficulties thinking straight. Schizophrenics are plagued with problems of attention, concentration, remembering, and arriving at a correct solution. They cannot formulate reasonable goals. They lack the intellectual energy required to plan, direct, correct processing errors, and rousing them to meet the occasions reflected in their goals.

Schizophrenics fear they will lose their minds. They cower at the prospect of suddenly finding they do not know who they are, the dying of their own self. They are at times restless, thin-skinned, and ultra sensitive to any think they construe as a reference to themselves. They can react violently to a perceived slight, threat, or insult.

Illogical thinking consists of reaching unreasonable conclusions based upon circumstantial evidence. Thinking at inappropriate levels of abstraction, is characteristic of person with schizophrenia. Schizophrenic people use words in an overly concrete or literal manner.

Perceptual distortions result in poor judgment. They cannot assess their experience realistically. They act in odd or queer ways. The lives of schizophrenic people are dotted with such instances of poor judgment, which stems from unrealistic assessment of a situation, and of themselves, or of the consequences of their actions. The disordered thinking and inaccurate perception of schizophrenic people often cause them to overlook or misjudge the feelings, motives, and actions of others.

They behave in ways that others find insensitive, self-centered, contentious, presumptuous, and suspicious or in some other way objectionable. Their poor social skills make it difficult for them to make or keep friends, even when they try. They frequently withdraw physically and become social isolates in their both work and recreation. They avoid situations that can bring them into close contact with others.

Many withdraw emotionally while placing themselves physically in close proximity to others. Public events sometimes help schizophrenics preserve the fiction that they are meaningfully involved with others. Even when mingling with other people, they maintain

a psychological distance by keeping their thoughts and feelings to themselves and interacting only on a formal, impersonal level.

Schizophrenic persons are frequently unable to prevent anxiety-provoking and socially unacceptable ideas from occupying their minds. Uncontrollable aggressive and sexual fantasies and constant concern about terrible events they might cause or suffer from are particularly likely to make the schizophrenics existence a waking nightmare.

Schizophrenics are consequently subject to severe bouts of anxiety and self-disgust. They have difficulty distinguishing between their dreams and waking reality.

Schizophrenics also suffer from poor integration of their feelings and thoughts. They may show blunted affect with little or no emotional response to any situations, or such inappropriate affect as giggling while relating a violently aggressive fantasy or crying while describing how good they feel.

Schizophrenics may be unable to prevent and control their aggressive and sexual ideas. When several of these impairments occur together and persist over any length of time, schizophrenia is present.

A prominent mood disorder coexists alongside a schizophrenia is present in schizoaffective disorders. Subtypes include affective bipolar and depressive types.

Schizophrenia, which exists along with grossly disorganized behavior, incoherence, marked loosening of associations; flat emotionally and grossly inappropriate affect is associated with disorganized schizophrenia.

Schizophrenia exists along with a preoccupation with systemized delusions, auditory hallucinations, argumentativeness, and possibility for violence and over-wearing suspiciousness is associated with paranoid schizophrenia.

Schizophrenia manifested by many or all of its variations including prominent delusions, hallucinations, incoherence, and grossly disorganized behaviors is associated with undifferentiated schizophrenia.

The DSM-IV-TR (2000) lists the diagnostic criteria for schizophrenia as:

- A. **Characteristic Symptoms.** Two or more of the following during a one-month period (or less if successfully treated): **Delusions**, **hallucinations**, and disorganized speech (loosening of associations), grossly disorganized behavior or catatonic (with extreme motor retardation or extreme motor agitation), negative symptoms (e.g., emotional blunting, loss of interest in things and activities, inability to experience happiness). **If** bizarre delusions or auditory hallucinations **and** a. voices keep a running commentary about the person's thoughts and behaviors **or** b. two or more voices converse with each other **then** only one criterion is needed.

- B. **Social/Occupational Dysfunction.** If one or more major areas of the person's life are markedly below premorbid functioning (work, interpersonal relations or self-care) **or if** childhood or adolescence failure to achieve expected levels of interpersonal, academic, or occupational achievement **then meets** the **B** criteria.
- C. **Duration.** Continuous signs persist for at least six months with at least one month that meets the 'A' criteria (Active Phase) and may include prodromal (early warning signs) or residual symptoms.
- D. **Rule out all other mental diseases** (e.g., schizoaffective/mood disorders)
All other medical conditions (substance use/medications or general medical conditions) have been ruled out. **If a history of pervasive developmental disorders exists** then prominent, hallucinations or delusions for one month are needed to make the diagnosis of schizophrenia.

Diagnostic and Statistical Manual of Mental Disorders-Text Revision
4th ed. (2000) American Psychiatric Association.

Schizophrenia is a psychotic disorder, which encompasses delusions, hallucinations, and disorganized behavior and speech (DSM-IV-TR 2000, p. 297).

The symptoms of schizophrenia are classified further as positive, negative, cognitive, and disorganized. **Positive** symptoms are delusions, hallucinations, paranoia, and bizarre behavior. These symptoms have been historically the major focus of treatment. **Negative** symptoms are apathy, loss of pleasure, disordered thought, and the loss of interest in engaging in vital life activities. These negative symptoms are the most crippling. **Cognitive** symptoms refer to deficits in attention, concentration, memory, decision-making, and problem solving. Anderson et al., (1998) think cognitive symptoms are the principle disabilities associated with schizophrenia. **Disorganized** symptoms signify the degree of disorganization of affect or behavior.

Anderson, C., Chakos, M., Mailman, R., & Lieberman, J., (1998). "Emerging roles for novel antipsychotic medications in the treatment of schizophrenia". *Psychiatric Clinics of North America* 21(1), 151-179.

Research Findings: Lishman, (1998) writes, "The acute organic reactions are called forth by a great number of different pathological processes affecting the brain..." (p. 9). A host of misfortunes follow-on brain insults, i.e., fragmentation of attention, thinking, and purposive reality based action, diminution of the powers of memory, and failures of judgment (p. 9-13).

Acute and chronic central nervous system conditions lead to psychotic reactions. Schizophrenia is one diagnostic possibility, which present with manifold symptoms. Head injuries at times lead to schizophrenic conditions. "All forms of schizophrenia have been reported after head injury..." (p. 190). "Paranoid forms are reported to be especially common..." (p. 190). Achté et al., (1969) followed 3552 head injured Finnish

WW II soldiers for over 20 years. Ninety-two of these cases developed schizophrenic-like symptoms (2.6 percent).

Achté, K. A, Hillbom, E., & Aalberg, V. (1969). "Psychoses following war brain injuries". Acta Psychiatrica Scandinavica 45, 1-18.

Achté found that mild brain injuries produced schizophrenia more frequently than did severe brain injuries. Whether or not other precipitating factors, such as familial histories of schizophrenia, added to the vulnerability to develop schizophrenia after head injuries is not clear. Lishman, (1998), p. 190, writes, "... the early onset of the psychosis (is) related to (the) severity of diffuse brain injury, and a possible special association with temporal lobe damage". Achté reported 2.1 percent of the group of brain injured Finnish WW II soldiers he studied were diagnoses with paranoid conditions.

Tumors of the temporal lobe are associated with schizophrenia. This is a rare occurrence, but greater than the occurrence in the general population. Pituitary tumors are also associated with the development of schizophrenia (Davison and Bagley, (1969)).

Davison, K., & Bagley, C. R., (1969). "Schizophrenia-like psychoses associated with organic disorders of the central nervous system: a review of the literature" In Current Problems in Neuropsychiatry.

Herrington, R. N. (Ed.), (1958). British Journal of Psychiatry Special Publication. No.4 Headly Brothers: Ashford, Kent.

Mendez et al., (1993) reports the excessive occurrence of schizophrenia with epilepsy. Interictal schizophrenia disorders occurred in 9.25 percent of 1611 epileptic patients. Complex partial seizures are associated with epilepsy and simultaneously occurring schizophrenia.

Mendez, M. F., Grau, R., Doss, R. C., & Taylor, J. L., ((1993). "Schizophrenia in epilepsy: seizure and psychoses variables". Neurology 43, (1073-1077).

Slater, et al., (1963) systematically collected 69 patients with unequivocal evidence of epilepsy that subsequently developed schizophrenia. The majority of these patients, 80 percent, experienced an insidious onset of symptoms with delusions as the first manifestation. Paranoid symptoms were present in the majority of the cases. Delusions were present in nearly all cases. Auditory hallucinations occurred in nearly half of the cases. Visual hallucinations were present in 16 percent of the cases. Thought disorders occurred in half of the patients.

Slater interpreted the changes observed in the epileptic schizophrenia patients as organic personality changes manifested by lack of spontaneity, dullness, (mental)

retardation, concrete thinking, and memory deficits. The epileptic foci were in the temporal lobe in 2/3rds of the cases.

Slater, E., Beard, A. W., & Glithero, E., (1963). "The schizophrenic-like disorders of epilepsy". British Journal of Psychiatry 109, 95-150.

Schizophrenic-like disorders are also associated with cannabis intoxication, general paresis, Huntington's disease, hyperthyroidism, hypothyroidism, narcolepsy, systemic lupus erythematosus, Wilson's disease, Korsakoff's Syndrome, multiple sclerosis, stroke, uremia, among other physical conditions (Lishman, 1998).

Lishman, W. A., (1998). "Organic Psychiatry: The Psychological Consequences of Cerebral Disorder". London: Blackwell Science Ltd.

The causes of schizophrenia are unclear. Schizophrenia has multiple interrelated etiologies, i.e., biological, genetic, and developmental abnormalities of the brain (Varcarolis, 2002, p. 525).

Varcarolis, E. M., (2002). "Foundations of psychiatric mental health nursing: a clinical approach". 4th ed. Philadelphia: W. B. Saunders Company.

A long list of chemical neurotransmitters has been identified, which are thought to be involved in the production of schizophrenic disorders. Dopamine, norepinephrine, serotonin, glutamate, GABA, and neuropeptides are among the many biochemical substances associated with the development of schizophrenia.

Genetic investigations with identical twins reveal a 45 percent chance of one twin developing a schizophrenic disorder if the other twin is so affected. If one twin has an autistic spectrum disorder, the other twin stands a 60 percent chance of developing impairments of communication and deficits in social interaction, i.e., Asperger's Syndrome. Some twins do not develop these disorders, however. Genetic causation is only a partial answer to the conundrum of the causation of the schizophrenic disorders (Hyman, 2003, p. 99).

Hyman, S. E., (2003). Diagnosing disorders. Special issue: Better Brains. Scientific American 289 (3), (96-103).

Jones and Cannon, (1998) noted if one parent were schizophrenic, 12 percent of the children would become schizophrenic. If both parents are schizophrenic, 46 percent of the children will be also.

Jones, P., & Cannon, M., (1998). "The new epidemiology of schizophrenia". Psychiatric Clinics of North America 12(1): 1-25.

Neuroimaging studies of individuals diagnosed with schizophrenia provide evidence of enlargement of the lateral ventricles, atrophy of the frontal lobes and the cortex in

general as well as atrophy of the cerebellum, enlargement of the third ventricle and asymmetry of one or both ventricles (Kaplan and Shadock, 1995).

Kaplan, H. I., & Shadock, B. J., (1995) Synopsis of psychiatry, 6th ed. Baltimore: Williams & Wilkins.

Thompson et al., (2001) found significant anatomical changes in brains of schizophrenic adolescents between the ages of 13 and 18 where a marked loss of gray matter in the cerebral cortex was demonstrated. This loss increased as the cellular losses progressed, spreading to other areas of the brain. These anatomical abnormalities were synchronous with the severity of the development of the psychotic symptoms and impairments produced by these diseases.

Thompson, P. M., Vidal, C., Giedd, J. N., Gochman, P., Blumenthal, J., Nicolson, R., Toga, A., & Rapoport, J. L., (2001). Proceedings of the National Academy of Sciences USA 98(20), 11650-11655.

Scale 8 on the MMPI and MMPI-2 contains 78 items. These Scale 8 items overlap with 11 other scales: **F (15), K (1), 1 (2), 2 (10), 3 (8), 4 (6), 5 (4), 6 (13), 7 (17), 9 (11), and Scale 0 (6)**. It is not readily apparent with elevations on Scale 8 just which symptoms would be observed in any one patient who may or may not be diagnosed with schizophrenia. All of the K scale items answered in the deviant direction is added to the Scale 8 raw score. Any 20 Scale 8 items endorsed in the deviant direction are needed to produce a Tscore of 65 when the client has an average score on the K scale (Greene, 2000).

Greene, R. L., (2000). The MMPI-2/MMPI: An Interpretive Manual (2nd Ed.). Boston: Allyn and Bacon.

The K scale was developed to improve the hit rate of Scale 8 (Dahlstrom and Dahlstrom, 1980). This results in the increase in the Scale 8 relative to the standardization group. This piggy backing on the norms group's data permitted the criterion group's data to be mounted above the normative group's score elevations in order to make Scale 8 elevations more prominent. Cross validation, studies were able to correctly identify no more than 60 percent of the total number of schizophrenics studied. Hathaway, (1980) reported that a considerable number of cases in 91 cross validation studies scored below a Tscore of 61 on Scale 8. Friedman et al., (2001) concluded, "A diagnostic conclusion of schizophrenia cannot be made solely on the basis of a Scale 8 elevation" (p. 132). Butcher and Williams, (1992) are of the opinion that Scale 8 clinical elevations can be due to severe depression, severe personality disorders, a 'rebel without a cause' attitude, sensory deficits, or a "cry-for-help". Anderson and Kunce, (1984) found high scoring Scale 8 college students, who suffered from social isolation, loneliness, and the inability to engage with others, were not schizophrenic.

Psychiatric settings yielding similar MMPI scores lead to different interpretations than those gotten in non-psychiatric settings. Greene, (2000) investigated MMPI data collected on psychiatric inpatients and out patients. The most frequent code pattern for men was 8-6, for women the 4-8, 8-4, and 8-6 code patterns were prominent. Psychiatric diagnoses were wide ranging. There is no assurance that Scale 8 elevations are associated exclusively with schizophrenic disorders.

Hathaway, S. R., (1980). "Scale 5 (Masculinity-Femininity), 6 (Paranoia), and (Schizophrenia)". In W. G. Dahlstrom & L. Dahlstrom (Eds.), (1980). Basic reading in the MMPI: A new selection on personality measurement (pp. 65-75). Minneapolis: University of Minnesota Press.

Greene, R. L., (1991). The MMPI-MMPI-2: An interpretive manual. Boston: Allyn & Bacon.

Friedman, A. F., Lewak, R., Nichols, D. S., & Webb, J., (2001). Psychological Assessment with the MMPI-2 L. (1992). "Essentials of MMPI-2 and MMPI-A interpretation. Minneapolis": University of Minnesota Press.

Anderson, W. P. & Kunce, J. T., (1984). "Diagnostic implications of markedly elevated MMPI Sc (Scale 8) scores for non-hospitalized clients". Journal of Clinical Psychology 40, 925-930.

PROFILE CHARACTERISTICS

Base rates for adolescent males with the 7-8 Pattern on the MMPI-A are 1.90 percent and on the MMPI 2.00 percent. Base rates for adolescent females with the 7-8 Pattern are 1.90 percent and 2.30 percent respectively (Archer, 1997).

Archer, R. P., (1997). MMPI-A: Assessing Adolescent Psychopathology (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Adolescents with the 7-8 Pattern present with a wide range of behaviors, some adaptive, some not. They are close to their mothers. They have problems making friends. Many are bed wetters. Half of them are one year behind in school. They believe their peers do not like them. Therapists see the 7-8 Pattern adolescent as socially inappropriate. They are depressed, anxious, and constricted. They fear their emotional-needs will not be met. They fear ridicule should they show their feelings openly. These adolescents do not have characterological disorders. They are fundamentally insecure, frightened, and tense. A subgroup of 7-8 Pattern adolescents experience auditory and visual hallucinations. A few are violent. They have nightmares. They delve into the supernatural. Some of these 7-8 Pattern adolescents have family members who have histories of mental illnesses (Marks et al., 1974).

Marks, P. A., Seeman, W., & Haller, D. L., (1974). "The Actuarial Use of the MMPI with Adolescents and Adults". New York: Oxford University Press

The 7-8 Patterns adolescents increasing levels of tension, related to failing capacity to resist anxiety and depression, lead them to treatment. They get no comfort for others. They become isolated and friendless (Archer, 1997).

Archer, R. P., (1997). MMPI-A: Assessing Adolescent Psychopathology (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Adults with the 7-8 Pattern are worried, socially ill at ease, isolated, friendless, and sad. They live in their heads. Their thoughts feed upon themselves (Greene, 2000).

Greene, R. L., (2000). The MMPI-2/MMPI: An Interpretive Manual (2nd Ed.). Boston: Allyn and Bacon.

The 7-8 Pattern reflects people in turmoil. They talk openly about what is on their minds, which makes listeners uncomfortable. They feel insecure and inadequate. They do not commit themselves to others or plans easily (Graham, 1977).

Graham, J., (1977). The MMPI: A Practical Guide, New York: Oxford University Press.

Male college student with the 7-8 Pattern are inner directed, insecure, and bashful. Female college students with the 7-8 Pattern are indecisive, insecure, and lack self-confidence. They complain of long-standing fatigue (Duckworth and Anderson, 1995).

Duckworth, J.C., & Anderson, W. P., (1995). MMPI & MMPI-2: Interpretation Manual for Counselors and Clinicians (4th Ed.). Bristol, PA: Accelerated Development.

Friedman et al., (2001) write that the 7-8 Pattern in adults, "...reflect(s) a deep sense of being fundamentally damaged, and these persons appear to be constantly apprehensive that somehow they are going to be discovered and humiliated because of their (self) perceived defects (p. 328).

Friedman, A. F., Lewak, R., Nichols, D. S., & Webb, J. T., (2001). "Psychological Assessment with the MMPI-2". Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Marks write that additional clinical characteristics of this profile include a profound fear of unpredictable frightening events. It is likely that this type of patients were at an early age teased and humiliated, or experienced some unpredictable and catastrophic event which led them to over-protect against unanticipated future events by thinking ahead and worrying.

Worrying is seen as trying to predict the future by thinking ahead of all possible eventualities.

These patients are amenable to almost any form of therapy. Implosion techniques in conjunction with insight therapy can be particularly useful as can desensitization to the originally unpredictable and frightening experiences.

It is likely that patients with this profile had a childhood characterized by being despised and rejected by a person upon whom life and security depended. Perhaps in some instances the child expressed some peculiar habit or eccentricities or was handicapped in some way, which led others to express anger, hatred and resentment towards the child. A child would self-protect by "shutting down" cognitively and emotionally which would lead in turn to impairments in cognitive and emotional functioning.

Therapy with these patients should concentrate on helping them feel comfortable at the moment. Moving into uncovering therapy too quickly is highly disorganizing to these patients, and change should be avoided. Achieving insight often leads these patients to feeling even more alien and defective. They are very sensitive to hostility and will require a consistent, warm, interactive and positive therapeutic relationship (Marks, P.A., 1987).

Marks, P. A. (1987). The Marks MMPI Adolescent Report and Manual. Wakefield, RI: Applied Innovations.

The base rates derived from a clinical sample of 15,316 from 52 JCAHO accredited psychiatric and substance abuse outpatient, partial hospitalization, and inpatient facilities are:

Base Rate

Aggregate	1.10
White Adult Males	1.52
White Adolescent Males	3.70
White Adult Females	0.55
White Adolescent Females	2.05
African American Males	1.07
African American Adolescent Males	2.52
African American Adult Females	0.58

DSM-IV DIAGNOSTIC CONSIDERATIONS

The following spectrum of diagnostic considerations has been derived from a clinical sample of 15,316 patients from 52 JCAHO accredited psychiatric and substance abuse outpatient, partial hospitalization, and inpatient facilities. The numbers in parentheses indicate ascending base rates of specific DSM-IV disorders diagnosed within this normative clinical population.

Axis I

- 90. Schizophrenia, Undifferentiated Type
- 40. Schizopreniform Disorder
- 90. Other (Or Unknown) Substance Abuse

- 3. Obsessive-Compulsive Disorder
- 2. Generalized Anxiety Disorder
- 30. Major Depressive Disorder, Recurrent, Unspecified
- 8. Brief Psychotic Disorder
- 3. Dysthymic Disorder
- 1. Delusional Disorder
- 90. Mood Disorder NOS

Axis II

- 20. Schizoid Personality Disorder
- 21. Schizotypal Personality Disorder
- 82. Avoidant Personality Disorder
- 301.83 Borderline Personality Disorder

