## Schizophrenia

Wallace (2001) describes incoherent, illogical, or inappropriate abstract thinking as the most prominent or obvious feature of schizophrenic disturbance. 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.

Schizophrenics, 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 themselves 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-weaning 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) list 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 lest six months with at lest 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. (4<sup>th</sup> 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.

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 schizophreniclike 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 or 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 answers 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, 6<sup>th</sup> 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 (Sc) 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 (2<sup>nd</sup> ed.). Boston: Allyn and Bacon.

The K scale was developed to improve the hit rate of Scale 8 (Sc) (Dahlstrom and Dahlstrom, 1980). This results in the increase in the Scale 8 (Sc) 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 (Sc) 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 (Sc). 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 (Sc) 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 (Sc) 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 8 (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.