

Cover painting by Dutch Post-Impressionist painter Vincent van Gogh - a self-portrait in oil on canvas in September 1889. The work, which may have been Van Gogh's last self-portrait, was painted shortly before he left Saint-Rémy-de-Provence in southern France. The painting is now at the Musée d'Orsay in Paris.

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Prologue

Our brains are neuroplastic and dynamic, physically malleable to both internal and external factors. These neuroplastic changes can be either adaptive or maladaptive. Neuroplasticity has opened the doors to new ways of understanding illness and recovery, as well as how these processes can be utilized to influence and direct outcomes.¹

Major changes or challenges prompt, the brain to adapt by remodeling and refining existing connections² which can be strengthened or enhanced by outgrowth of dendrites, axonal sprouting, and increasing or strengthening synaptic connections. Conversely, various factors can contribute to loss of synapses, shrinkage or retraction of dendrites (de-branching), and pruning of axons, thereby reducing communication in those areas. After injury (e.g., stroke, traumatic brain injury), axonal sprouting and pruning can serve to re-establish connections and ultimately restore some functioning.³

This area of neuroplasticity has particular relevance in determining the dynamics of mental illnesses, neurogenic, and personality disorders thereby challenging commonly held notions on how the minds meander on paths towards rehabilitation or deterioration. In the determination of the condition of the mind at the time a legally significant act happens which could be benign like in signing a contract, and preparing a will or grave as in the commission of a crime, judicial reliance on the expert witness tilts the balance on either side of the fulcrum on validity and conviction.

J.D.C. Gumpal

¹ Jill L. Kays, Robin A. Hurley, and Katherine H. Taber, "The Dynamic Brain: Neuroplasticity and Mental Health," The Journal of Psychiatry and the Neurosciences, 1 Apr 2012https://doi.org/10.1176/appi.neuropsy.

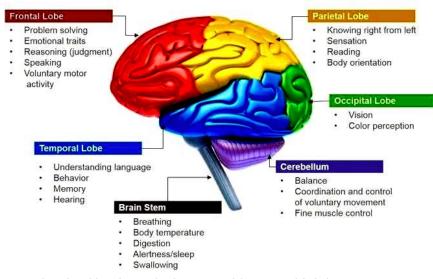
² Warraich Z, Kleim JA: Neural plasticity: the biological substrate for neurorehabilitation. PM R 2010; 2(Suppl 2):S208–S219 Crossref, Medline, Google Scholar

 $^{^3}$ Kerr AL, Cheng SY, Jones TA: Experience-dependent neural plasticity in the adult damaged brain. J Commun Disord 2011; 44:538–548 Medline, Google Scholar

THE MIND, COGNITION, PERCEPTION

& EMOTIONS

ippocrates taught that the brain is the seat of the mind. This has not been seriously challenged ever since. The human brain, a tangible 1300-gram organ containing 86 billion neurons⁴ remains as the physical organ on which the mind dwells. Neuroscience has mapped out areas of the brain based on observable and experienced functions and activities.



Parts and Functions of the Brain. Image from:https://anatomyinfo.com/parts-of-the-brain/

⁴ Suzana Herculano-Houzel, "The remarkable, yet not extraordinary, human brain as a scaled-up primate brain and its associated cost, Proceedings of the National Academy of Sciences of the United States of America, June 26, 2012, https://doi.org/10.1073/pnas.1201895109

FOREBRAIN: Cerebrum (cerebral cortex)

The forebrain is the largest part of the human brain associated with higher brain functions such as thought and action. Nerve cells make up the gray surface. White nerve fibers beneath the surface carry signals between nerve cells in other parts of the brain and body.

A deep furrow divides the cerebrum into two halves, known as the left and right hemispheres. The right hemisphere is considered our creative side, and the left hemisphere is considered our logical side. A bundle of axons, called the *corpus callosum*, connects the two hemispheres.

The cerebrum is divided into lobes:

Frontal lobe: concerned with emotions, reasoning, planning, movement, and parts of speech. It is also involved in purposeful acts such as creativity, judgment, and problem solving, and planning.

Parietal lobes: connected with the processing of nerve impulses related to the senses, such as touch, pain, taste, pressure, and temperature. They also have language functions.

Temporal lobes: responsible for hearing, memory, meaning, and language. They also play a role in emotion and learning. The temporal lobes are concerned with interpreting and processing auditory stimuli.

Occipital lobe: involved with the brain's ability to recognize objects. It is responsible for our vision.

MID-BRAIN

The mid-brain is located below the cerebrum and above the hindbrain placing it near the center of the brain. The primary role of the midbrain is a relay station for our visual and auditory systems. Portions of the midbrain called the red nucleus and the *substantia nigra* are involved in the control of body movement and contain a large number of dopamine-producing neurons.

Limbic System – the "emotional brain," or "childish brain" is deep within the cerebrum and contains the thalamus, hypothalamus, amygdala, and hippocampus.

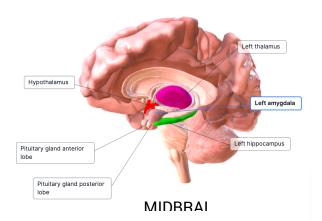
Thalamus: responsible for sensory and motor integration. Receives sensory information and relays it to the cerebral cortex. The cerebral cortex also sends information to the thalamus which it transmits to other parts of the brain and the brain stem.

Hypothalamus: pea-sized and located at the base of the brain, controls body temperature, emotions, hunger, thirst, appetite, digestion, and sleep.

Amygdala: the critical processor for the senses and involved in emotionally laden memories. It contains a huge number of opiate receptor sites that are implicated in rage, fear, and sexual feelings.

Hippocampus: forms, organizes, and stores memories. It connects emotions and senses, such as smell and sound, to memories. It is also involved in learning.

and food



Pituitary gland: regulates hormones helps turn in to energy.

Pineal gland:

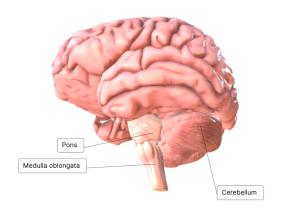
produces melatonin which modulates sleep patterns in both circadian and seasonal cycles. It is activated by light and controls growth and maturation

HINDRRAIN

Cerebellum: controls movement, balance, posture, and coordination. It is also linked to thinking, novelty, and emotions. The **limbic system** often referred to as the "emotional brain," is found buried within the cerebrum.

Pons: for motor control and sensory analysis with parts important for the level of consciousness and sleep. Its link to the cerebellum makes it involved in movement and posture.

Medulla Oblongata - maintains vital body functions, such as breathing, digestion, and heartbeat.



2 CLASSIFYING MENTAL ILLNESSES

he causes of mental illnesses range from genetic and chromosomal disorders, environmental toxins, diseases, psychiatric conditions, and psychological trauma. These may also be intermittent or chronic. The gravity of the condition may fluctuate over time and is different from person to person. Ongoing research shows that a person's state of mind is a continuum rather than discrete and static.

Proving insanity and imbecility is both a legal and medical challenge. What are the tests or standards by which a person may be determined to be in such a condition of mind as to merit exemption from criminal liability.

What constitutes "mental disorder" is problematic because it encompasses a large number of human behavioral symptoms and conditions, ranging from common disorders such as anxiety and depression to more serious psychopathological disturbances like dementia and schizophrenia, as well as substance-use disorders related to drug and alcohol abuse and dependence, and various personality disorders.⁵

MEDICAL DEFINITION

In medical terms, mental disorders are most commonly defined in relation to the International Classification of Diseases (ICD), produced by the World Health Organisation (WHO), and the Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association (APA). Both resources contain a categorical classification system of mental disorders and provide mental health professionals with the diagnostic tools to identify them ⁶. In legal terms,

Thanks to the collaborative agreements between the WHO and the APA, the two classification systems have become increasingly harmonized. In their current revisions, ICD-10 and DSM-5, they are not entirely homologous, but for the most part, they are identical or differ in insignificant ways concerning the diagnostic categories and criteria⁷.

The ICD-10 recognizes that mental disorder is not an exact term, but is used to imply the existence of clinically recognizable set of symptoms or behavior associated in most cases with distress and with interference with personal functions. Social deviance or conflict alone, without personal dysfunction, should not be included in mental disorder as defined here⁸.

⁵ Busfield, J. (2011). Mental illness. Cambridge: Polity Press.

⁶ von Berg, P. (2014). Criminal Judicial Review: A Practitioner's Guide to Judicial Review in the Criminal Justice System and Related Areas. Oxford: Hart Publishing Limited.

⁷ Helfgott, J. (2008). Criminal Behaviour: Theories, Typologies and Criminal Justice. Los Angeles: SAGE.

⁸ World Health Organization, (1992). The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva: World Health Organization.

The DSM-5, on the other hand, defines mental disorder as a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g. political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, 9.

Both systems define mental disorders by associating them with distress or disability. In other words, they are understood to be conditions associated with harm. However, not all conditions associated with harm are to be considered as mental disorders, only those which involve a *personal dysfunction*. Deviation from social norms alone does not count as a mental disorder, neither for the ICD-10 nor the DSM-5. The latter also establishes that the condition cannot simply be an expectable or culturally approved response to a common stressor or loss ¹⁰.

PREVALENCE OF MENTAL DISORDER

Reports in the United Kingdom show that male prisoners are 14 times more likely to have a mental disorder than men in general, female prisoners are 35 times more likely than women in general.¹¹

A 2014 survey in the United States showed that over half of the inmates in state prisons and local jails manifest symptoms of mental disorder. Specifically, the rate is 56% for state prisons inmates, 45% for federal prison inmates, and 64% for local jail inmates. For female inmates, the rates are even higher, with 61% of federal female inmates and 73% of state female inmates showing signs of mental disorder¹². Currently, prisons of the United States hold 10 times more mentally ill people than state hospitals across the country, leading prisons to be seen as *de facto* psychiatric hospitals.¹³

A study of 2001in Canada found that the prevalence of schizophrenia in the general population was about 0.5%, while the rate in provincial prisons was 1.5% and in federal prisons 2.2% ¹⁴. Overall, it is estimated that 80-90% of the prison inmates have a diagnosis of mental disorder, with antisocial personality disorder being the most frequent (60-80%). Other research has found a high prevalence of conditions such as fetal alcohol syndrome, developmental disabilities, low IQ, and brain injuries.¹⁵

⁹ American Psychiatric Association (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed). Arlington: American Psychiatric Association.

 $^{^{10}}$ Bolton, D. (2008). What is Mental Disorder? An Essay in Philosophy, Science, and Values. Oxford University Press

¹¹ Parker, I. (2015). Handbook of Critical Psychology. London: Routledge.

¹² Arnold, C. (2010). Mental Illness and Crime. In: F. Cullen and P. Wilcox, (ed.), Encyclopaedia of Criminological Theory, Volume 2. Thousand Oaks: SAGE.

¹³ Parker, 2015: Mills and Kendall, 2016.

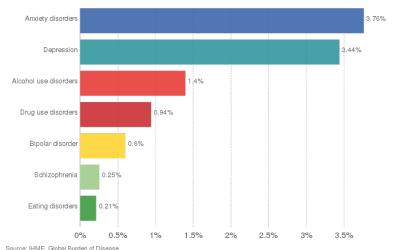
¹⁴ MacPhail, A. and Verdun-Jones, S. (2013). Mental Illness and the Criminal Justice System. Vancouver. International Centre for Criminal Law Reform and Criminal Justice Policy.

In a 2015 survey in New South Wales, Australia, "any psychiatric disorder" (psychosis, anxiety disorder, affective disorder, substance use disorder, personality disorder, or neurasthenia) was substantially higher in the prison population (74%, of which 72% were males and 86% females) than in the general community (22%).

According to all studies mentioned above, female prisoners are more likely to suffer mental disorders than male prisoners. Reasons for this include the "multiplicity of disadvantages and damages" women experience before entering into prison. Almost half of them have suffered from domestic violence, and a third have been sexually abused. The psychological distress caused by such events has been linked to a higher prevalence of self-harming behavior and suicide 17. In addition, women experience the pains of imprisonment more intensely than men due to their role as mothers and primary carers. Worry over home and family causes depression and anxiety, and the situation is further exacerbated by the small number of women's prisons, as this means that women are more likely to be imprisoned away from their home area. 18

Prevalence by mental and substance use disorder, World, 2017

Share of the total population with a given mental health or substance use disorder. Figures attempt to provide a true estimate (going beyond reported diagnosis) of disorder prevalence based on medical, epidemiological data, surveys and meta-regression modelling.



MENTAL DISORDERS IN THE PHILIPPINES

In 2010, the Philippine Statistical Authority estimates that 14% of a population of 1.4 million Filipinos with disabilities were identified to have a mental disorder. It identified that mental illness is the third most prevalent form of morbidity with only 88 cases of mental health problems for every 100,000 of the population.

¹⁶ Medlicott, D. (2007). Women in prison. In: Y. Jewkes, (ed.), Handbook on Prisons. Cullompton: Willan Publishing.

¹⁷ Mills, A. and Kendall, K. (2016). Mental health in prisons. In: Y. Jewkes, J. Bennet and B. Crewe, (ed.), Handbook on Prisons. Abingdon: Routledge.

The 2005 WHO World Health Survey in the Philippines identified that, of 10,075 participants, 0.4% had a diagnosis of schizophrenia and 14.5% had a diagnosis of depression. Recent data from the Philippine Health Information System on Mental Health identified based on a survey of 14 public and private hospitals from 2014 to 2016) revealed that as high as 42% of the 2562 surveyed patients were treated for schizophrenia.

3 MENTAL STATUS OF THE ACCUSED

rticle 12 of the Revised Penal Code considers the condition of insanity as exempted from criminal liability. The arrest and temporary detention by reason of insanity or imbecility is not considered a penalty¹⁹ and violent insanity requiring compulsory confinement of the patient in a hospital is a legal ground for detention.²⁰ In case of insanity, the execution and service of the penalties are suspended.²¹

COMPETENCY TO STAND TRIAL

The Supreme Court in *People v. Estrada*²² adopted the American legal distinction between the accused's "present insanity" or insanity at the time of the court proceedings as separate and distinct from his criminal responsibility at the time of the commission of the act. The defense of insanity in a criminal trial concerns the defendant's mental condition at the time of the crime's commission. "Present insanity" is commonly referred to as "competency to stand trial"²³ and relates to the appropriateness of conducting the criminal proceeding in light of the defendant's present inability to participate meaningfully and effectively.²⁴

In competency cases, the accused may have been sane or insane during the commission of the offense, which relates to a determination of his guilt. However, if he is found incompetent to stand trial, the trial is simply postponed until such time as he may be found competent. Incompetency to stand trial is not a defense; it merely postpones the trial.²⁵

In determining a defendant's competency to stand trial, the test is whether he has the capacity to comprehend his position, understand the nature and object of the proceedings against him, to conduct his defense in a rational manner, and to cooperate, communicate with, and assist his counsel to the end that any available defense may be interposed.²⁶ It is not enough for the judge to find that the defendant is oriented to time and place, and has some recollection of

¹⁹ Article 24, Revised Penal Code.

²⁰ Article 124, Revised Penal Code.

²¹ Article 79, Revised Penal Code.

²² G.R. No. 130487, June 19, 2000

²³ Pizzi, "Competency to Stand Trial in Federal Courts: Conceptual and Constitutional Problems," 45 Univ. of Chicago Law Review 21-22 [1977]. The term "present insanity" was used in the case of Youtsey v. United States, 97 F. 937 [1899] to distinguish it from insanity at the time of commission of the offense.

Am Jur 2d, Criminal Law Sec. 97 [1981 ed.]; LaFave and Scott, Criminal Law, p. 333, 2d ed, [1986]; del Carmen, Criminal Procedure, Law and Practice, pp. 395-396, 3rd ed. [1995]; Ferdico, Criminal Procedure for the Criminal Justice Professional, pp. 55-56, 7th ed. [1999].

²⁵ ld.

²⁶ 21 Am Jur 2d, "Criminal Law," Sec. 96; see list of cases therein; see also Raymond and Hall, California Criminal Law and Procedure, p. 230 [1999].

events, but that the test must be whether he has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding—and whether he has a rational as well as factual understanding of the proceedings against him.²⁷

There are two distinct matters to be determined under this test: (1) whether the defendant is sufficiently coherent to provide his counsel with information necessary or relevant to constructing a defense; and (2) whether he is able to comprehend the significance of the trial and his relation to it.²⁸ The first requisite is the relation between the defendant and his counsel, such that the defendant must be able to confer coherently with his counsel. The second is the relation of the defendant vis-a-vis the court proceedings, i.e., that he must have a rational as well as a factual understanding of the proceedings.

The rule barring the trial or sentence of an insane person is for the protection of the accused, rather than of the public.²⁹ It has been held that it is inhuman to require an accused disabled by an act of God to make a just defense for his life or liberty.³⁰ To put a legally incompetent person on trial or to convict and sentence him is a violation of the constitutional rights to a fair trial³¹ and due process of law³² and this has several reasons underlying it.

For one, the accuracy of the proceedings may not be assured, as an incompetent defendant who cannot comprehend the proceedings may not appreciate what information is relevant to the proof of his innocence. Moreover, he is not in a position to exercise many of the rights afforded a defendant in a criminal case, e.g., the right to effectively consult with counsel, the right to testify on his own behalf, and the right to confront opposing witnesses, which rights are safeguards for the accuracy of the trial result. Second, the fairness of the proceedings may be questioned, as there are certain basic decisions in the course of a criminal proceeding that a defendant is expected to make for himself, and one of these is his plea. Third, the dignity of the proceedings may be disrupted, for an incompetent defendant is likely to conduct himself in the courtroom in a manner that may destroy the decorum of the court. Even if the defendant remains passive, his lack of comprehension fundamentally impairs the functioning of the trial process. A criminal proceeding is essentially an adversarial proceeding. If the defendant is not a conscious and intelligent participant, the adjudication loses its character as a reasoned interaction between an individual and his community and becomes an invective against an insensible object. Fourth, it is important that the defendant knows why he is being punished, a comprehension which is greatly dependent upon his understanding of what occurs at trial. An incompetent defendant may not realize the moral reprehensibility of his conduct. The societal goal of

²⁷ Dusky v. United States, 362 US 402, 4 L ed 2d 824, 825, 80 S Ct 788 [1960]. This is commonly referred to as the "Dusky standard"—LaFave and Scott, supra, at 334-335.

²⁸ LaFave and Scott, supra.; see also Notes: "Incompetency to Stand Trial," 81 Harvard Law Review, 454, 459 [Dec. 1967].

²⁹ State v. Swails, 223 La 751, 66 So. 2d 796, 799 [1953].

³⁰ In re Buchanan, 129 Cal. 360, 61 P. 1120, 1121 [1900]; State v. Swails, supra; see also Weihofen, Mental Disorder as a Criminal Defense, p. 429 [1954].

³¹ Pate v. Robinson, 383 US 375, 15 L ed 2d 815, 822, 86 S Ct 836 [1966].

³² 21 Am Jur 2d, Criminal Law, Sec. 95 [198 ed.]; Youtsey v. United States, 97 fed. 937, 940-946 [CA6 1899]; Drope v. Missouri, 420 U.S. 162, 43 L ed 2d 103, 113-114, 95 S Ct 896 [1975]; Pate v. Robinson, 383 U.S. 815, 15 L ed 2d 815, 822, 86 S Ct 836 [1966].

institutionalized retribution may be frustrated when the force of the state is brought to bear against one who cannot comprehend its significance.³³

The determination of whether a sanity investigation or hearing should be ordered rests generally in the discretion of the trial court.³⁴ Mere allegation of insanity is insufficient. There must be evidence or circumstances that raise a "reasonable doubt"³⁵ or a "bona fide doubt"³⁶ as to defendant's competence to stand trial. Among the factors a judge may consider is evidence of the defendant's irrational behavior, history of mental illness or behavioral abnormalities, previous confinement for mental disturbance, demeanor of the defendant, and psychiatric or even lay testimony bearing on the issue of competency in a particular case.³⁷

Thus, in the *Estrada* case, the Court remarked that, "the trial judge is not a psychiatrist or psychologist or some other expert equipped with the specialized knowledge of determining the state of a person's mental health. To determine the accused-appellants competency to stand trial, the court, in the said case, should have at least ordered the examination of accused-appellant, especially in the light of the latter's history of mental illness."

The human mind is an entity, and understanding it is not purely an intellectual process but depends to a large degree upon emotional and psychological appreciation.³⁸ Thus, an intelligent determination of an accused's capacity for rational understanding ought to rest on a deeper and more comprehensive diagnosis of his mental condition than laymen can make through observation of his overt behavior. Once a medical or psychiatric diagnosis is made, then can the legal question of incompetency be determined by the trial court. By this time, the accused's abilities may be measured against the specific demands a trial will make upon him.³⁹

The Court further stated that, "If the mental examination on accused-appellant had been promptly and properly made, it may have served a dual purpose⁴⁰ by determining both his competency to stand trial and his sanity at the time of the offense. In some Philippine cases, the medical and clinical findings of insanity made immediately after the commission of the crime served as one of the bases for the acquittal of the accused.⁴¹ The crime in the instant case was committed way back in December 1994, almost six (6) years ago. At this late hour, a medical finding alone may make it impossible for us to evaluate

³³ Id

^{34 21} Am Jur 2d, "Criminal Law," Sec. 103 [1981 ed.].

³⁵ The term "reasonable doubt" was used in Drope v. Missouri, 420 U.S. 162, 43 L ed 2d 103, 113-114, 95 S Ct 896 [1975]

³⁶ In Pate v. Robinson, supra, at 822, the court used the term "bona fide doubt" as to defendant's competence; See also LaFave and Scott, supra, Note 34, at 335-336.

³⁷ 21 Am Jur 2d, "Criminal Law," Sec. 104 [1981 ed.]; Drope v. Missouri, supra, at 118; Pate v. Robinson, supra, at 822.

^{38 &}quot;Incompetency to Stand Trial," 81 Harv. L. Rev. 454, 470 [1967].

³⁹ Gunther v. United States, 215 F. 2d 493, 496-497 (D.C. Cir. 1954) — While expert psychiatric judgment is relevant to determine a defendant's competence to stand trial, it is not controlling. Resolution of this issue requires not only a clinical psychiatric judgment but also a judgment based upon a knowledge of criminal trial proceedings that is peculiarly within the competence of the trial judge; see also United States v. Sermon, 228 F. Supp. 972, 976-977 (W.D. Mo. 1964).

⁴⁰ Pizzi, "Competency to Stand Trial in Federal Courts: Conceptual and Constitutional Problems, 45 Univ. of Chicago L. Rev. 21, 38, Note 84 [1977] — dual purpose examinations are the customary practice in the U.S.

⁴¹ People v. Austria, 260 SCRA 106 [1996] — the medical examination was conducted 1 1/2 years after the crime's commission; People v. Bonoan, 64 Phil. 82 [1937] — the examinations were conducted 1 to 6 months after the crime; People vs. Bascos, 44 Phil. 204 [1922] — the medical exam was conducted immediately after the commission of the crime.

appellant's mental condition at the time of the crime's commission for him to avail of the exempting circumstance of insanity.⁴² Nonetheless, under the present circumstances, accused-appellants competence to stand trial must be properly ascertained to enable him to participate, in his trial meaningfully."

By depriving appellant of a mental examination, the trial court effectively deprived appellant of a fair trial. The trial court's negligence was a violation of the basic requirements of due process; and for this reason, the proceedings before the said court must be nullified. In *People v. Serafica*,⁴³ the Court ordered that the joint decision of the trial court be vacated and the cases remanded to the court a quo for proper proceeding. The accused, who was charged with two (2) counts of murder and one (1) count of frustrated murder, entered a plea of "guilty" to all three charges and was sentenced to death. The Court found that the accused's plea was not an unconditional admission of guilt because he was "not in full possession of his mental faculties when he killed the victim;" and thereby ordered that he be subjected to the necessary medical examination to determine his degree of insanity at the time of commission of the crime.⁴⁴

⁴² People v. Balondo, 30 SCRA 155., 160 [1969].

^{43 29} SCRA 123 [1969].

⁴⁴ Id., at 129.

4 SCHIZOPHRENIA

ohn Forbes Nash Jr. (June 13, 1928 – May 23, 2015) was an American mathematician who made fundamental contributions to differential geometry, game theory, and the study of partial differential equations.⁴⁵ Nash's work has provided insight into the factors that govern chance and decision-making inside complex systems found in everyday life.

His theories are widely used in economics. Serving as a senior research mathematician at Princeton University during the later part of his life, he shared the 1994 Nobel Memorial Prize in Economic Sciences with game theorists Reinhard Selten and John



Image from: https://www.frackcheckwv.net/

Harsanyi. In 2015, he also shared the Abel Prize with Louis Nirenberg for his work on nonlinear partial differential equations. John Nash is the only person to be awarded both the Nobel Memorial Prize in Economic Sciences and the Abel Prize.⁴⁶

In 1959, Nash began showing clear signs of mental illness and spent several years at psychiatric hospitals being treated for schizophrenia. After 1970, his condition slowly improved, allowing him to return to academic work by the mid-1980s.⁴⁷ His struggles with his illness and his recovery became the basis for Sylvia Nasar's biographical book, *A Beautiful Mind* in 1998, as well as a film of the same name directed by Ron Howard, in which Nash was portrayed by Russell Crowe.⁴⁸

SCHIZOPHRENIA & CRIME

Schizophrenia is a chronic and severe mental disorder affecting 20 million people worldwide.⁴⁹ Stigma, discrimination, and violation of human rights of people with schizophrenia are common. Schizophrenia, however, is treatable. Treatment with medicines and psychosocial support is effective.

Persons with schizophrenia are thought to be at increased risk of committing violent crimes 4 to 6 times the level of general population individuals without

⁴⁵ Goode, Erica (May 24, 2015). "John F. Nash Jr., Math Genius Defined by a 'Beautiful Mind,' Dies at 86". The New York Times.

^{46 &}quot;John F. Nash Jr. and Louis Nirenberg share the Abel Prize". Abel Prize. March 25, 2015.

⁴⁷ Nasar, Sylvia (November 13, 1994). "The Lost Years of a Nobel Laureate". The New York Times. Princeton, New Jersey. Retrieved May 6, 2014.

⁴⁸ Russell Ira Crowe (born 7 April 1964) is a Kiwi actor, director, musician, and singer.

⁴⁹ GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. The Lancet; 2018 (https://doi.org/10.1016/S0140-6736(18)32279-7).

this disorder. However, risk estimates vary substantially across studies, and considerable uncertainty exists as to what mediates this elevated risk. Despite this uncertainty, current guidelines recommend that *violence risk assessment* ⁵⁰should be conducted for all patients with schizophrenia. ⁵¹

A study showed that parental violent crime had moderate associations with violent crimes in male and female offsprings with at least 2 hospitalizations for schizophrenia. This suggests that familial (genetic or early environmental) risk factors have an important role in the etiology of violent behavior among individuals with schizophrenia and should be considered in violence risk assessment.⁵²

Schizophrenia and other psychoses are associated with violence and violent offending, particularly homicide. However, most of the excess risk appears to be mediated by substance abuse comorbidity. The risk in these patients with comorbidity is similar to that for substance abuse without psychosis.⁵³

DIAGNOSTIC CRITERIA

Under DSM 5-295.90, the diagnostic criteria of schizophrenia are as follows: The presence of 2 (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated), with at least 1 of them being (1), (2), or (3):

- (1) delusions
- (2) hallucinations
- (3) disorganized speech
- (4) grossly disorganized or catatonic behavior, and
- (5) negative symptoms

DELUSIONS

Delusions come in many forms, but they all have one thing in common: The people affected by them can't be convinced that something they believe isn't true. Those unshakeable beliefs are different from person to person and affect different parts of their lives.

Common themes of delusions:

Persecution: This is based on the idea that a person or object is trying to hurt you or work

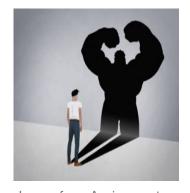


Image from: Assignment

⁵⁰ An assessment tool to determine the nature and degree of risk the individual may pose for certain kinds of behaviors in light of anticipated conditions and contexts.

⁵¹ Fazel, Seena et al. "Schizophrenia, substance abuse, and violent crime." JAMA vol. 301,19 (2009): 2016-23. doi:10.1001/jama.2009.675.

⁵² Fazel S, Grann M, Carlström E, Lichtenstein P, Långström N. J Clin Psychiatry. 2009 Mar; 70(3):362-9. Epub 2009 Mar 10.

⁵³ Fazel S, Gulati G, Linsell L, Geddes JR, Grann M. PLoS Med. 2009 Aug; 6(8):e1000120. Epub 2009 Aug 11.

against you.

Grandiose: This is when a person feels that they themselves, certain objects, or specific situations are crucially important, powerful, or valuable.

Infidelity: This involves unusual jealousy or possessiveness toward another person.

Love: This is an obsessive love that takes over all other thoughts or an idea that someone famous or unknown is in love with you.

Religion: Delusions of this kind aren't necessarily caused by zealous belief but more by the environment in which the person lives.

Guilt or unworthiness: This theme is common in people with depression.

Negation or nihilistic: This theme involves intense feelings of emptiness.

Somatic: This is a false belief that the person has a physical issue or medical problem.

Mixed: This is when a person is affected by delusions with two or more themes.

HALLUCINATIONS

The acting out in a psychotic moment in patients with mental illness remains the most formidable event, causing sometimes the problem of criminal liability. Control of attendance at psychotherapy and psychotropic treatment are preventive and curative necessary measures to avoid crossing the dangerous acts.⁵⁴

Hallucinations are sensory experiences that appear real but are created by your mind. They can affect all five senses.⁵⁵

Visual hallucinations involve seeing things that aren't there. The hallucinations may be of objects, visual patterns, people, or lights. For example, you might see a person who's not in the room or flashing lights that no one else can see. ⁵⁶

Olfactory hallucinations involve your sense of smell. You might smell an unpleasant odor when Waking up in



the middle of the night or feel that your body smells bad when it doesn't. This type of hallucination can also include scents you find enjoyable, like the smell of flowers.⁵⁷

⁵⁴ European Psychiatry, Volume 33, Issue S1: Abstracts of the 24th European Congress of Psychiatry, March 2016, pp. S464 - S465, D01: https://doi.org/10.1016/j.eurpsy.2016.01.1690

⁵⁵ Chitra Badii, "Everything You Need to Know About Hallucinations," Healthline, July 10, 2019, https://www.healthline.com/health/hallucinations

⁵⁶ ld.

Gustatory hallucinations are similar to olfactory hallucinations, but they involve your sense of taste instead of smell. These tastes are often strange or unpleasant.⁵⁸

Auditory hallucinations are among the most common type of hallucination. You might hear someone speaking to you or telling you to do certain things. The voice may be angry, neutral, or warm. Other examples of this type of hallucination include hearing sounds like someone walking in the attic or repeated clicking or tapping noises.⁵⁹

Tactile hallucinations involve the feeling of touch or movement in your body. For example, you might feel that bugs are crawling on your skin or that your internal organs are moving around. You might also feel the imagined touch of someone's hands on your body.⁶⁰

DISORGANIZED SPEECH

Examples of disorganized speech include: Making up words (**neologisms**). For example: "I'm going to the park to ride the wallywhoop." Rhyming words (**clang speech**). For example: "Deck the halls with boughs of holly, folly, polly, dolly, hello Dolly, want a lollipop?"

Saying sentences that make no sense to other people (word salad). For example: "Give paper floor me school hop bus." Repeating exactly what someone else has said (echolalia).

DISORGANIZED BEHAVIOUR

Examples of disorganized behavior are: repeating the same activity (word or behavior) over and over again (perseveration). Repeating exactly what someone else has done (echopraxia). Dressing oddly, such as wearing many sets of clothing one over the other or wearing hats, gloves, and heavy coats in the summer. Doing things in public that are usually done only in private.

CATATONIC BEHAVIOR

Catatonia is a psychomotor syndrome that is characterized by unusual behavioral and movement disturbances. Catatonic behavior can manifest with slow or diminished movement (retarded or akinetic type), excess or agitated movement (excited type), or dangerous physiological changes (malignant type). Although catatonia has historically been related to schizophrenia, it is most often seen in mood disorders.⁶¹

NEGATIVE SYMPTOMS

The current DSM-5 describes negative symptoms as "restricted emotional expression and avolition." The first term includes reduction in expressions of emotion "in the face, eye contact, intonation of speech (prosody), and

⁵⁹ Id.

⁶⁰ Id.

⁵⁸ Id.

⁶¹ Murrow, Jeffrey P.; Spurling, Benjamin C.; Marwaha, Raman (2020), "Catatonia", StatPearls, Treasure Island (FL): StatPearls Publishing, PMID 28613592, retrieved 6 January 2021

movements of the hand, head, and face that normally give an emotional emphasis to speech."62

The National Institute of Mental Health Measurement and Treatment Research to Improve Cognition in Schizophrenia consensus panel has recently defined five negative symptoms:⁶³ **blunted affect** (diminished facial and emotional expression), **alogia** (decrease in verbal output or verbal expressiveness), **asociality** (lack of involvement in social relationships of various kinds), **avolition** (a subjective reduction in interests, desires, and goals and a behavioral reduction of self-initiated and purposeful acts), and **anhedonia** (inability to experience pleasure from positive stimuli).

62 Mitra, Sayantanava et al. "Negative symptoms in schizophrenia." Industrial psychiatry journal vol. 25,2 (2016): 135-144. doi:10.4103/ipj.jpj_30_15

⁶³ The NIMH-MATRICS consensus statement on negative symptoms. Kirkpatrick B, Fenton WS, Carpenter WT Jr, Marder SR Schizophr Bull. 2006 Apr; 32(2):214-9.

5 INTELLECTUAL DISABILITY

ntelligence is the general mental capacity that involves reasoning, planning, solving problems, thinking abstractly, comprehending complex ideas, learning efficiently, and learning from experience.⁶⁴

Historically, intellectual disability (ID)⁶⁵ has been defined by significant cognitive deficits—which have been established through a standardized measure of intelligence, in particular, with an IQ score of below 70 (two standard deviations below the mean of 100 in the population)—and also by significant deficits in functional and adaptive skills. *Adaptive skills* involve the ability to carry out age-appropriate daily life activities. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), which is published by the American Psychiatric Association, classifies the severity of ID according to the levels of support needed to achieve an individual's optimal personal functioning.⁶⁶

Severity Category	Approximate Percent Distribution of Cases by Severity	DSM-IV Criteria (severity levels were based only on IQ categories)	DSM-5 Criteria (severity classified on the basis of daily skills)
Mild	85%	Approximate IQ range 50-69	Can live independently with minimum levels of support.
Moderate	10%	Approximate IQ range 36–49	Independent living may be achieved with moderate levels of support, such as those available in group homes.
Severe	3.5%	Approximate IQ range 20–35	Requires daily assistance with self-care activities and safety supervision.
Profound	1.5%	IQ <20	Requires 24-hour care.

Table from: Mental Disorders and Disabilities Among Low-Income Children. Washington (DC): National Academies Press (US); 2015 Oct 28. 9, Clinical Characteristics of Intellectual Disabilities. Available from: https://www.ncbi.nlm.nih.gov/books/NBK332877/

DSM-5 defines *intellectual disabilities* as neurodevelopmental disorders that begin in childhood and are characterized by intellectual difficulties as well as difficulties in conceptual, social, and practical areas of living. The DSM-5 diagnosis of ID requires the satisfaction of three criteria:

⁶⁴ AAIDD (American Association on Intellectual Developmental Disabilities). Intellectual disability: Definition, classification, and systems of supports. Washington, DC: AAIDD; 2010.

⁶⁵ previously termed "mental retardation"

- Deficits in intellectual functioning—"reasoning, problem solving, planning, abstract thinking, judgment, academic learning, and learning from experience"—confirmed by clinical evaluation and individualized standard IQ testing.
- 2. Deficits in adaptive functioning that significantly hamper conforming to developmental and sociocultural standards for the individual's independence and ability to meet their social responsibility:
- 3. The onset of these deficits during childhood.

The DSM-IV definition included impairments of general mental abilities that affect how a person functions in conceptual, social, and daily life areas. DSM-5 abandoned specific IQ scores as a diagnostic criterion.

CLASSIFICATIONS OF SEVERITY

The terms "mild," "moderate," "severe," and "profound" have been used to describe the severity of the condition. This approach has been helpful in that aspects of mild to moderate ID differ from severe to profound ID. The DSM-5 retains this grouping with more focus on daily skills than on specific IQ range.

MILD TO MODERATE INTELLECTUAL DISABILITY

The majority of people with ID are classified as having mild intellectual disabilities. Individuals with mild ID are slower in all areas of conceptual development and social and daily living skills. These individuals can learn practical life skills, which allows them to function in ordinary life with minimal levels of support. Individuals with moderate ID can take care of themselves, travel to familiar places in their community, and learn basic skills related to safety and health. Their self-care requires moderate support.

SEVERE INTELLECTUAL DISABILITY

Severe ID manifests as major delays in development, and individuals often have the ability to understand speech but otherwise have limited communication skills⁶⁷. Despite being able to learn simple daily routines and to engage in simple self-care, individuals with severe ID need supervision in social settings and often need family care to live in a supervised setting such as a group home.

PROFOUND INTELLECTUAL DISABILITY

Persons with profound intellectual disability often have congenital syndromes These individuals cannot live independently, and they require close supervision and help with self-care activities. They have very limited ability to communicate and often have physical limitations. Individuals with mild to moderate disability are less likely to have associated medical conditions than those with severe or profound ID.

EVALUATION OF SEVERITY

Currently AAIDD publishes a framework for evaluating the severity of ID, the Supports Intensity Scale (SIS), which focuses on the types and intensities of

⁶⁷ Sattler JM. Assessment of children: Behavioral and clinical applications. San Diego: J.M. Sattler; 2002.

supports needed to enable an individual to lead a normal and independent life, rather than defining severity in terms of deficits. The SIS evaluates the support needs of an individual across 49 life activities, divided into six categories: home living, community living, life-long learning, employment, health and safety, and social activities.⁶⁸

Accurate measurement requires an instrument that is psychometrically valid, culturally appropriate, and individually administered. In the absence of appropriate measurement instruments, screening instruments are still able to assist in the identification of individuals who need further testing. IQ test results fall along the normal (bell-shaped) curve, with an average IQ of 100, and individuals who are intellectually disabled are usually two standard deviations below the average (IQ below 70). Various issues (e.g., co-occurring communication problems, and sensory or motor difficulties) can affect assessment, and psychologists must address these in considering which tests to use. IQ scores are usually reported with an associated confidence interval which indicates a range within which the "true" score is likely to fall.

A frequently used IQ measure for children in the United States is the Wechsler Intelligence Scale for Children (WISC-V). It historically measured verbal IQ, performance IQ, and full performance IQ ⁶⁹. In its most recent edition, the WISC-V provides an overall IQ score as well as five other scores for verbal comprehension, visual-spatial skills, fluid reasoning, working memory, and processing speed ⁷⁰.

ETIOLOGY

Environmental factors such as exposure to toxic substances (e.g., prenatal alcohol exposure, prenatal or postnatal lead exposure), nutritional deficiencies (e.g., prenatal iodine deficiency), brain radiation, childhood brain infections, traumatic brain injury, and maternal infections (e.g., rubella, cytomegalovirus) can lead to ID. Additionally, prenatal and postnatal complications—e.g., complications of prematurity such as hypoxemia and periventricular hemorrhage—may cause brain injury resulting in ID 71.

Genetic factors play a major role in ID. Different genetic causes may lead to ID. Down syndrome (trisomy 21) is the most common genetic cause of ID in the United States, occurring approximately once every 700 live births (Parker et al., 2010). Fragile X syndrome is the most common known inherited cause of ID, and it affects approximately 1 per 5,000 males (Coffee et al., 2009). Many cases of ID in the population are of unknown etiology.⁷²

Because of the varied causes and consequences of ID, an initial evaluation should address intellectual and life skills, the identification of genetic and nongenetic etiologies, and the diagnosis of conditions that need treatment (e.g., epilepsy and phenylketonuria). Prenatal and perinatal medical histories, a

⁶⁸ IH

⁶⁹ Wechsler D, Kaplan E, Fein D, Kramer J, Morris R, Delis D, Maerlender A. The Wechsler intelligence scale for children—fourth edition integrated technical and interpretative manual. San Antonio, TX: Harcourt Assessment, Inc; 2004.

⁷⁰ Pearson Education. WISC-V. 2015. [May 4, 2015]. www .wiscv.com.

⁷¹ Gustafsson C. Intellectual disability and mental health problems: Evaluation of two clinical assessment instruments, occurrence of mental health problems and psychiatric care utilisation. Acta Universitatis Upsaliensis. Uppsala: 2003. [July 5, 2015].

physical examination, genetic evaluations, metabolic screening and neuroimaging assessment may aid in the determination of characteristics that may influence the course of the disorder.

JUSTICE & INTELLECTUAL DISABILITY

People with intellectual, cognitive or developmental disabilities get involved as both victims and suspects/offenders more often than individuals without disabilities. Some researchers have found that people with intellectual or developmental disabilities (I/DD) have a 4 to 10 times higher risk of becoming victims of crime when compared to those without disabilities⁷³. Children with any type of disability are 3.4 times more likely to be abused compared to children without disabilities⁷⁴.

In 2008, The National Crime Victim Survey⁷⁵ found that people with disabilities experience higher rates of violence than people without disabilities (40 victimizations per 1,000 persons with disabilities compared to about 20 per 1,000 without disabilities), and that the rate of victimization was twice as high for people with disabilities. Another alarming finding was that people with cognitive disabilities (or intellectual disabilities) had the highest risk of violent victimization.⁷⁶

Individuals with this disability also constitute a small, but nonetheless growing percentage of suspects/offenders within the criminal justice system. While those with intellectual disabilities comprise 2% to 3% of the general population, they represent 4% to 10% of the prison population, with an even greater number of those in juvenile facilities and in jails ⁷⁷. One US study that looked at the number of people with disabilities in state and federal prisons found that fewer than 1% of inmates had physical disabilities while 4.2% had mental retardation. ⁷⁸

Some people with intellectual disabilities commit crimes, not because they have below-average intelligence, but because of their unique personal experiences, environmental influences, and individual differences. During the early 1900s, some professionals believed that individuals with intellectual disabilities were predisposed to becoming criminals due to their disability. This view lost support during the 1930s when its leaders rescinded their original beliefs and the focus on causes of crime shifted from biological reasons to psychological and sociological ones.

Research from the mid- 80s to the 1990s found that the types of crime committed range from property crimes, like theft or robbery, to physical and

⁷³ Sobsey, D. (1994). Violence and abuse in the lives of people with disabilities. Baltimore: Paul H. Brookes PublishingCo.

⁷⁴ Sullivan, P. & Knutson, J. (2000). Maltreatment and disabilities: A population-based epidemiological study. Child Abuse & Neglect, 24 (10), 1257-1273.

⁷⁵ is a United States agency the nation's primary source of information on criminal victimization. Each year, data are obtained from a nationally representative sample of about 240,000 interviews on criminal victimization, involving 160,000 unique persons in about 95,000 households.

⁷⁶ Harrell, E. & Rand, M. (2010) Crimes Against People with Disabilities. Bureau of Justice Statistics. U.S. Department of Justice.

⁷⁷ Petersilia, J. (August 2000). Doing justice? Criminal offenders with developmental disabilities. CPRC Brief, 12 (4), California Policy Research Center, University of California.

⁷⁸ Veneziano, L. & Veneziano, C. (1996). Disabled inmates. In M. McShane & F. Williams Encyclopedia of American Prisons. New York:

sexual assault. Some have been accused of murder as well. One researcher found that many who committed sexual offenses were victimized sexually and that their experience as a victim was linked to their later experience as the offender.⁷⁹

Almost all people with intellectual disabilities now live in the community and are susceptible to becoming involved in the criminal justice system as suspects and/or victims. As suspects, individuals with this disability are frequently used by other criminals to assist in law-breaking activities without understanding their involvement in a crime or the consequences of their involvement. They may also have a strong need to be accepted and may agree to help with criminal activities in order to gain friendship.

⁷⁹ Firth, H., Balogh, R., Berney, T. Bretherton, K. Graham, S. & Whibley, S. (2001). Psychopathol ogy of sexual abuse in young people with intellectual disability. Journal of Intellectual Disability Research 45 (3), 244-252

6 ORGANIC MENTAL DISORDER

rganic mental disorder is a previously used term to describe a dysfunction of the brain that was meant to exclude psychiatric disorders. It is currently known under the category of neurocognitive disorders. It describes reduced brain function due to illnesses that are not psychiatric in nature.⁸⁰

Sometimes the term organic mental disorder is used interchangeably with the terms organic brain syndrome (OBS), chronic organic brain syndrome, or neurocognitive disorder—this latter term is the one used more commonly now.⁸¹ There is a long tradition of dualism in psychiatry of "functional" and "organic" disorders (expressed in the diagnosis of OBS) that reflects the belief that some behavioral abnormalities originate in brain pathology, whereas others result from "psychological" or "functional" factors, such as maladjustment in the domains of emotional, social, and familial function.⁸²

Today it is recognized that a variety of medical conditions can cause the full range of psychiatric syndromes and symptoms. Therefore, many diagnostic categories of psychiatric symptoms resulting from specific medical conditions are recognized and are typically classified together with other clinical entities with similar clinical manifestations.⁸³

As brain tissue does not regenerate to an appreciable extent, damage resulting in OBS, is in a sense "irreversible." Thus, many forms of OBS result in permanent dysfunction. In cases of degenerative conditions, the dysfunction gets worse. But in many other forms, such as in cases of traumatic brain injury (TBI), various infections, and strokes, when occurring in the context of otherwise healthy individuals, where some form of new learning can still take place (which may be well into the 7th or 8th decades of life), functional improvement can take place.⁸⁴

⁸⁰ Ann Logsdon, "Organic Mental Disorder Causes and Treatment," verywellmind, May 6, 2020, https://www.verywellmind.com/organic-mental-disorders-2162516

⁸¹ Sachdev P, Blacker D, Blazer D, et al. Classifying neurocognitive disorders: the DSM-5 approach. Nat Rev Neurol. 2014;10(11):634–642. doi:10.1038/nrneurol.2014.181

⁸² Avraham Schweiger, Jason W. Brown, in Encyclopedia of Psychotherapy, 2002, https://www.sciencedirect.com/sdfe/pdf/download/eid/3-s2.0-B0123430100001550/first-page-pdf

MAJOR NEUROCOGNITIVE DISORDER

The diagnostic criteria based on DSM-5 for a major neurocognitive disorder are:

- A. Evidence of significant cognitive decline from a previous level of performance in one or more cognitive domains (complex attention, executive function, learning, and memory, language, perceptual-motor, or social cognition) based on:
- 1. Concern of the individual, a knowledgeable informant, or the clinician that there has been a *significant decline in cognitive function*; and
- A substantial impairment in cognitive performance, preferably documented by standardized neuropsychological testing or, in its absence, another quantified clinical assessment.
- B. The cognitive deficits interfere with independence in everyday activities (i.e., at a minimum, requiring assistance with complex instrumental activities of daily living such as paying bills or managing medications).
- C. The cognitive deficits do not occur exclusively in the context of a delirium.85
- D. The cognitive deficits are not better explained by another mental disorder (e.g., major depressive disorder, schizophrenia).

Major neurocognitive disorders may be due to: Alzheimer's disease, Frontotemporal lobar degeneration, Lewy body disease, Vascular disease, Traumatic brain injury, Substance/medication use, HIV infection, Prion disease, Parkinson's disease, Huntington's disease, other medical condition, multiple etiologies, or unspecified.

The medico-legal concern on the impairment of cognition is to determine whether the major neurocognitive disorder is serious enough to be considered in an insanity defense.

Insanity defense is primarily used in criminal prosecutions and is based on the assumption that at the time of the crime, the defendant was suffering from severe mental illness and therefore, was incapable of appreciating the nature of the crime and differentiating right from wrong behavior, hence making them not legally accountable for crime. Insanity defense is a legal concept, not a clinical one (medical one). This means that just suffering from a mental disorder is not sufficient to prove insanity. The defendant has the burden of proving the defense of insanity by a "preponderance of the evidence" which is similar to a civil case. It is hard to determine legal insanity, and even harder to successfully defend it in court.⁸⁶ This is where expert testimony and reliance on diagnostic objective criteria can help establish or disprove legal insanity.

⁸⁵ Delirium is a serious disturbance in mental abilities that results in confused thinking and reduced awareness of the environment. The start of delirium is usually rapid — within hours or a few days.

⁸⁶ Math, Suresh Bada et al. "Insanity Defense: Past, Present, and Future." Indian journal of psychological medicine vol. 37,4 (2015): 381-7. doi:10.4103/0253-7176.168559

CEREBROVASCULAR DISEASE

Cerebrovascular disease refers to a variety of conditions that affect the supply of blood to the brain. These can include several types of stenosis, aneurysms and vascular malformations, and can lead to transient ischemic attacks, hemorrhaging and strokes.⁸⁷ Cerebrovascular diseases is the third highest cause of death in the Philippines in 2019-2020.⁸⁸ Stroke⁸⁹ is a complication of cerebrovascular disease which likewise is high in the country claiming 14% of all deaths in 2020.⁹⁰

Cognitive impairment and memory loss are common after a stroke. Approximately 30% of stroke patients develop dementia within 1 year of stroke onset. 91 Stroke affects the cognitive domain, which includes attention, memory, language, and orientation. The most affected domains are attention and executive functions; at the time of stroke diagnosis, memory problems are often prominent.

In the case of People v. Dungo,92 the accused who stabbed an employee of the Department of Agrarian Reform, put up the defense of insanity. He was ordered confined to the National Center for Mental Health where he was diagnosed to have an organic mental disorder secondary to cerebro-vascular accident or stroke. In deciding whether or not the accused was insane when he committed the act, the Court noted that there has been no case that laid down a definite test or criterion for insanity. The criterion using the definition of insanity under Section 1039 of the Revised Administrative Code, which states that insanity is "a manifestation in language or conduct, of disease or defect of the brain, or a more or less permanently diseased or disordered condition of the mentality, functional or organic, and characterized by perversion, inhibition, or by disordered function of the sensory or of the intellective faculties, or by impaired or disordered volition." The Court further stated that, "Insanity as defined above is evinced by a deranged and perverted condition of the mental faculties which is manifested in language or conduct. An insane person has no full and clear understanding of the nature and consequence of his act. Thus, insanity may be shown by surrounding circumstances fairly throwing light on the subject, such as evidence of the alleged deranged person's general conduct and appearance, his acts and conduct inconsistent with his previous character and habits, his irrational acts and beliefs, and his improvident bargains. Evidence of insanity must have reference to the mental condition of the person whose sanity is in issue, at the very time of doing the act which is the subject of inquiry.

Although the defense's expert witnesses, who are doctors of the National Center for Mental Health, concluded that the accused was suffering from psychosis or insanity classified under organic mental disorder secondary to cerebrovascular

⁸⁷ Cerebrovascular disease, Baptist Health, accessed December 9, 2021, https://www.baptisthealth.com/services/heart-care/conditions/cerebrovascular-disease

⁸⁸ Causes of Deaths in the Philippines (Preliminary): January to December 2020, Philippine Statistics Authority, https://psa.gov.ph/content/causes-deaths-philippines-preliminary-january-december-2020

⁸⁹ A stroke occurs when part of the brain loses its blood supply due to a blockage or rupture in one of the arteries, causing permanent damage.

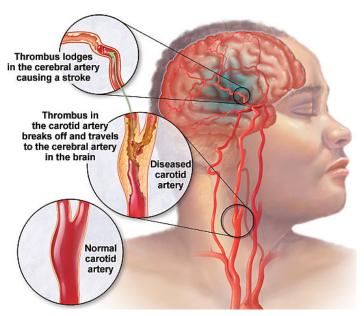
⁹⁰ WHO Data, World Health Rankings, access December 09, 2021, https://www.worldlifeexpectancy.com/philippines-stroke

⁹¹ A review of screening tests for cognitive impairment. Cullen B, O'Neill B, Evans JJ, Coen RF, Lawlor BAJ Neurol Neurosurg Psychiatry. 2007 Aug; 78(8):790-9.

⁹² G.R. No. 89420, July 31, 1991.

accident or stroke before, during and after the commission of the crime charged and that the mental illness of the accused was characterized by perceptual disturbances manifested through impairment of judgment and impulse control, impairment of memory and disorientation, and hearing of strange voices, thereby concluding that the accused suffered from psychosis which was organic and permanent, this being a defect of the brain, the Court nevertheless affirmed his conviction because at the time that he perpetrated the act was sane.

The evidence showed that the accused, at the time he perpetrated the act was carrying an envelope where the fatal weapon was hidden. This is an evidence that the accused consciously adopted a pattern to kill the victim. The suddenness of the attack classified the killing as treacherous and therefore murder. After the accused ran away from the scene of the incident after he stabbed the victim several times, he was apprehended and arrested in Metro Manila, an indication that he took flight in order to evade arrest. This to the mind of the Court is another indicia that he was conscious and knew the consequences of his acts in stabbing the victim.



Stroke. Image from: wikinut.com

7 PERSONALITY DISORDERS

ersonality disorders in general are pervasive, enduring patterns of thinking, perceiving, reacting, and relating that cause significant distress or functional impairment. Personality disorders vary significantly in their manifestations, but all are believed to be caused by a combination of genetic and environmental factors. Many gradually become less severe with age, but certain traits may persist to some degree after the acute symptoms that prompted the diagnosis of a disorder abate. Diagnosis is clinical. Treatment is with psychosocial therapies and sometimes drug therapy.⁹³

A brief orientation on personality disorder has gained legal importance because of its use in annulment cases on the basis of psychological incapacity.⁹⁴

TYPES OF PERSONALITY DISORDERS

DSM-5 groups the 10 types of personality disorders into 3 clusters (A, B, and C), based on similar characteristics. However, the clinical usefulness of these clusters has not been established.

CLUSTER A is characterized by appearing odd or eccentric. It includes the following personality disorders with their distinguishing features:

Paranoid: Mistrust and suspicion **Schizoid**: Disinterest in others

Schizotypal: Eccentric ideas and behavior

CLUSTER B is characterized by appearing dramatic, emotional, or erratic. It includes the following personality disorders with their distinguishing features:

Antisocial: Social irresponsibility, disregard for others, deceitfulness, and manipulation of others for personal gain

Borderline: inner emptiness, unstable relationships, and emotional dysregulation

Histrionic: Attention seeking and excessive emotionality
Narcissistic: Self-grandiosity, need for admiration, and lack of empathy

CLUSTER C is characterized by appearing anxious or fearful. It includes the following personality disorders with their distinguishing features:

Avoidant: Avoidance of interpersonal contact due to rejection sensitivity

Dependent: Submissiveness and a need to be taken care of Obsessive-compulsive: Perfectionism, rigidity, and obstinacy

⁹³ https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/overview-of-personality-disorders

⁹⁴ Reyes v. Reyes, G.R. No. 185286, August 18, 2010; Yambao v. Yambao, G.R. No. 184063, January 24, 2011; Lim v. Lim, G.R. No. 176464, February 24, 2010; Narcissistic - Toring v. Toring, G.R. No. 165321, August 3, 2010.

PARANOID PERSONALITY DISORDER

Patients with paranoid personality disorder suspect that others are planning to exploit, deceive, or harm them. They feel that they may be attacked at any time and without reason. Even though there is little or no evidence, they persist in maintaining their suspicions and thoughts.⁹⁵

Often, these patients think that others have greatly and irreversibly injured them. They are hypervigilant for potential insults, slights, threats, and disloyalty and look for hidden meanings in remarks and actions. They closely scrutinize others for evidence to support their suspicions. For example, they may misinterpret an offer of help as implication that they are unable to do the task on their own. If they think that they have been insulted or injured in any way, they do not forgive the person who injured them. They tend to counterattack or to become angry in response to these perceived injuries. Because they distrust others, they feel a need to be autonomous and in control.⁹⁶

These patients are hesitant to confide in or develop close relationships with others because they worry that the information may be used against them. They doubt the loyalty of friends and the faithfulness of their spouse or partner. They can be extremely jealous and may constantly question the activities and motives of their spouse or partner in an effort to justify their jealousy.⁹⁷

Thus, patients with paranoid personality disorder can be difficult to get along with. When others respond negatively to them, they take these responses as confirmation of their original suspicions.⁹⁸

For a diagnosis of paranoid personality disorder, patients must have a persistent distrust and suspiciousness of others beginning in early adulthood as shown by the presence of ≥ 4 of the following:99

- 1. Unjustified suspicion that other people are exploiting, injuring, or deceiving them
- Preoccupation with unjustified doubts about the reliability of their friends and coworkers
- 3. Reluctance to confide in others lest the information be used against them
- Misinterpretation of benign remarks or events as having hidden belittling, hostile, or threatening meaning
- 5. Holding of grudges for insults, injuries, or slights
- Readiness to think that their character or reputation has been attacked and quickness to react angrily or to counterattack
- 7. Recurrent, unjustified suspicions that their spouse or partner is unfaithful

 $^{^{95}}$ Mark Zimmerman, MSD Manual, May 2021, $\underline{\text{https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorder-ppd}$

⁹⁶ Id.

⁹⁷ Id.

⁹⁸ Id.

⁹⁹ DSM 5.

SCHIZOID PERSONALITY DISORDER

Patients with schizoid personality disorder seem to have no desire for close relationships with other people, including relatives. They have no close friends or confidants, except sometimes a 1st-degree relative. They rarely date and often do not marry. They prefer being by themselves, choosing activities and hobbies that do not require interaction with others (eg, computer games). Sexual activity with others is of little, if any, interest to them. They also seem to experience less enjoyment from sensory and bodily experiences (eg, walking on the beach).¹⁰⁰

These patients do not seem bothered by what others think of them—whether good or bad. Because they do not notice normal clues of social interaction, they may seem socially inept, aloof, or self-absorbed. They rarely react (eg, by smiling or nodding) or show emotion in social situations. They have difficulty expressing anger, even when they are provoked. They do not react appropriately to important life events and may seem passive in response to changes in circumstances. As a result, they may seem to have no direction to their life. 101

Rarely, when these patients feel comfortable revealing themselves, they admit that they feel pain, especially in social interactions. Symptoms of schizoid personality disorder tend to remain stable over time, more so than those of other personality disorders.¹⁰²

The DSM-5 clinical criteria or a diagnosis of schizoid personality disorder, patients must have a persistent pattern of detachment from and general disinterest in social relationships and limited expression of emotions in interpersonal interactions which have began by early adulthood. This pattern is shown by the presence of \geq 4 of the following: 103

- No desire for or enjoyment of close relationships, including those with family members
- 2. Strong preference for solitary activities
- 3. Little, if any, interest in sexual activity with another person
- 4. Enjoyment of few, if any, activities
- 5. Lack of close friends or confidants, except possibly 1st-degree relatives
- 6. Apparent indifference to the praise or criticism of others
- 7. Emotional coldness, detachment, or flattened affect

SCHIZOTYPAL PERSONALITY DISORDER

In schizotypal personality disorder, cognitive experiences reflect a more florid departure from reality (eg, ideas of reference, paranoid ideas, bodily illusions,

 $^{^{100}}$ Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/paranoid-personality-disorder-ppd

¹⁰¹ Id..

¹⁰² ld.

¹⁰³ DSM 5, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/schizoid-personality-disorder-scpd

magical thinking) and a greater disorganization of thought and speech than occurs in other personality disorders.¹⁰⁴

Reported prevalence of schizotypal personality disorder varies, but estimated prevalence is about 3.9% of the general US population. This disorder may be slightly more common among men.¹⁰⁵

Patients with schizotypal personality disorder do not have close friends or confidants, except for 1st-degree relatives, They are very uncomfortable relating to people. They interact with people if they have to but prefer not to because they feel like they are different and do not belong. However, they may say their lack of relationships makes them unhappy. They are very anxious in social situations, especially unfamiliar ones. Spending more time in a situation does not ease their anxiety.

These patients often incorrectly interpret ordinary occurrences as having special meaning for them (ideas of reference). They may be superstitious or think they have special paranormal powers that enable them to sense events before they happen or to read other people's minds. They may think that they have magical control over others, thinking that they cause other people to do ordinary things (eg, feeding the dog), or that performing magical rituals can prevent harm (eg, washing their hands 3 times can prevent illness).

Speech may be odd. It may be excessively abstract or concrete or contain odd phrases or use phrases or words in odd ways. Patients with schizotypal personality disorder often dress oddly or in an unkempt way (eg, wearing ill-fitting or dirty clothes) and have odd mannerisms. They may ignore ordinary social conventions (eg, not make eye contact), and because they do not understand usual social cues, they may interact with others inappropriately or stiffly. Patients with schizotypal personality disorder are often suspicious and may think others are out to get them.

The clinical criteria under DSM-5 for a diagnosis of schizotypal personality disorder, patients must have a persistent pattern of intense discomfort with and decreased capacity for close relationships and cognitive or perceptual distortions and eccentricities of behavior which began in early adulthood as shown by the presence of ≥ 5 of the following:

- Ideas of reference (notions that everyday occurrences have special meaning or significance personally intended for or directed to themselves) but not delusions of reference (which are similar but held with greater conviction)
- 2. Odd beliefs or magical thinking (eg, believing in clairvoyance, telepathy, or a sixth sense; being preoccupied with paranormal phenomena)
- 3. Unusual perceptional experiences (eg, hearing a voice whispering their name)
- 4. Odd thought and speech (eg, that is vague, metaphorical, excessively elaborate, or stereotyped)
- 5. Suspicions or paranoid thoughts

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¹⁰⁶ DSM 5, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/schizotypal-personality-disorder-stpd

- 6. Incongruous or limited affect
- 7. Odd, eccentric, or peculiar behavior and/or appearance
- 8. Lack of close friends or confidants, except for 1st-degree relatives
- 9. Excessive social anxiety that does not lessen with familiarity and is related mainly to paranoid fears

ANTISOCIAL PERSONALITY DISORDER

People with antisocial personality disorder commit unlawful, deceitful, exploitative, reckless acts for personal profit or pleasure and without remorse; they may do the following: Justify or rationalize their behavior (eg, thinking losers deserve to lose, looking out for number one); Blame the victim for being foolish or helpless; Be indifferent to the exploitative and harmful effects of their actions on others. 107

Antisocial personality disorder is more common among men than among women (6:1), and there is a strong heritable component. Prevalence decreases with age, suggesting that patients can learn over time to change their maladaptive behavior.

The DSM-5 clinical criteria for a diagnosis of antisocial personality disorder, patients must have a persistent disregard for the rights of others. Also, patients must have evidence that a conduct disorder has been present before age 15 years. This disregard is shown by the presence of \geq 3 of the following:

- Disregarding the law, indicated by repeatedly committing acts that are grounds for arrest
- Being deceitful, indicated by lying repeatedly, using aliases, or conning others for personal gain or pleasure
- 3. Acting impulsively or not planning ahead
- 4. Being easily provoked or aggressive, indicated by constantly getting into physical fights or assaulting others
- 5. Recklessly disregarding their safety or the safety of others
- Consistently acting irresponsibly, indicated by quitting a job with no plans for another one or not paying bills
- 7. Not feeling remorse, indicated by indifference to or rationalization of hurting or mistreating others

Antisocial personality disorder is diagnosed only in people ≥ 18 years.

BORDERLINE PERSONALITY DISORDER

Patients with borderline personality disorder have an intolerance of being alone; they make frantic efforts to avoid abandonment and generate crises, such as

¹⁰⁷ Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/antisocial-personality-disorder-aspd

making suicidal gestures in a way that invites rescue and caregiving by others.¹⁰⁸

The DSM-5 clinical criteria for a diagnosis of borderline personality disorder, are persistent patterns of unstable relationships, self-image, and emotions (ie, emotional dysregulation), and pronounced impulsivity that began in early adolescence and adulthood. This persistent pattern is shown by ≥ 5 of the following:¹⁰⁹

- 1. Desperate efforts to avoid abandonment (actual or imagined)
- 2. Unstable, intense relationships that alternate between idealizing and devaluing the other person
- 3. An unstable self-image or sense of self
- 4. Impulsivity in ≥ 2 areas that could harm themselves (eg, unsafe sex, binge eating, reckless driving)
- 5. Repeated suicidal behavior and/or gestures or threats or self-mutilation
- Rapid changes in mood, lasting usually only a few hours and rarely more than a few days
- 7. Persistent feelings of emptiness
- 8. Inappropriately intense anger or problems controlling anger
- Temporary paranoid thoughts or severe dissociative symptoms triggered by stress

HISTRIONIC PERSONALITY DISORDER

Patients with histrionic personality disorder use their physical appearance, acting in inappropriately seductive or provocative ways, to gain the attention of others. They lack a sense of self-direction and are highly suggestible, often acting submissively to retain the attention of others.¹¹⁰

The DSM-5 clinical criteria for a diagnosis of histrionic personality disorder is a persistent pattern of excessive emotionality and attention-seeking behavior that began in early adulthood. This pattern is shown by the presence of ≥ 5 of the following:111

- 1. Discomfort when they are not the center of attention
- Interaction with others that is inappropriately sexually seductive or provocative
- 3. Rapidly shifting and shallow expression of emotions

¹⁰⁸ Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/en-in/professional/psychiatric-disorders/personality-disorders/borderline-personality-disorder-bpd

¹⁰⁹ DSM-5, https://www.msdmanuals.com/en-in/professional/psychiatric-disorders/personality-disorders/borderlinepersonality-disorder-bpd

¹¹⁰ Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/en-in/professional/psychiatric-disorders/personality-disorders/histrionic-personality-disorder-hpd

- 4. Consistent use of physical appearance to call attention to themselves
- 5. Speech that is extremely impressionistic and vague
- 6. Self-dramatization, theatricality, and extravagant expression of emotion
- 7. Suggestibility (easily influenced by others or situations)
- 8. Interpretation of relationships as more intimate than they are

NARCISSISTIC PERSONALITY DISORDER

Patients with narcissistic personality disorder have difficulty regulating self-esteem. They need praise and affiliations with special people or institutions; they also tend to devalue other people so that they can maintain a sense of superiority.¹¹²

The DSM-5 clinical criteria for a diagnosis of narcissistic personality disorder is a persistent pattern of grandiosity, need for admiration, and lack of empathy that begun in early adulthood. This pattern is shown by the presence of ≥ 5 of the following:113

- 1. An exaggerated, unfounded sense of their own importance and talents (grandiosity)
- Preoccupation with fantasies of unlimited achievements, influence, power, intelligence, beauty, or perfect love
- 3. Belief that they are special and unique and should associate only with people of the highest caliber
- 4. A need to be unconditionally admired
- 5. A sense of entitlement
- 6. Exploitation of others to achieve their own goals
- 7. A lack of empathy
- 8. Envy of others and a belief that others envy them
- 9. Arrogance and haughtiness

AVOIDANT PERSONALITY DISORDER

People with avoidant personality disorder have intense feelings of inadequacy and cope maladaptively by avoiding any situations in which they may be evaluated negatively.¹¹⁴

¹¹² Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/en-in/professional/psychiatric-disorders/personality-disorders/narcissistic-personality-disorder-npd

¹¹³ ld

¹¹⁴ Mark Zimmerman, MSD Manual, May 2021, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders

The reported prevalence of avoidant personality disorder in the US varies, but the estimated prevalence is about 2.4%. An avoidant personality disorder affects women and men equally.¹¹⁵

THE DSM-5 clinical criteria for a diagnosis of avoidant personality disorder, patients must have a persistent pattern of avoiding social contact, feeling inadequate, and being hypersensitive to criticism and rejection that began in early adulthood. This pattern is shown by the presence of \geq 4 of the following:¹¹⁶

- Avoidance of job-related activities that involve interpersonal contact because they fear that they will be criticized or rejected or that people will disapprove of them
- 2. Unwillingness to get involved with people unless they are sure of being liked
- 3. Reserve in close relationships because they fear ridicule or humiliation
- 4. Preoccupation with being criticized or rejected in social situations
- 5. Inhibition in new social situations because they feel inadequate
- 6. Self-assessment as socially incompetent, unappealing, or inferior to others
- 7. Reluctance to take personal risks or participate in any new activity because they may be embarrassed

DEPENDENT PERSONALITY DISORDER

Patients with dependent personality disorder need to be taken care of and results in loss of their autonomy and interests. Because they are intensely anxious about taking care of themselves, they become excessively dependent and submissive.¹¹⁷

The DSM-5 clinical criteria for a diagnosis of dependent personality disorder are a persistent, excessive need to be taken of, resulting in submissiveness and clinging behavior which began in early adulthood. This persistent need is shown by the presence of ≥ 5 of the following:¹¹⁸

- 1. Difficulty making daily decisions without an inordinate amount of advice and reassurance from other people
- 2. A need to have others be responsible for most important aspects of their life
- 3. Difficulty expressing disagreement with others because they fear loss of support or approval
- 4. Difficulty starting projects on their own because they are not confident in their judgment and/or abilities (not because they lack motivation or energy)
- 5. Willingness to go to great lengths (eg, do unpleasant tasks) to obtain support from others

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¹¹⁶ DSM-5, https://www.msdmanuals.com/professional/psychiatric-disorders/personality-disorders/avoidant-personality-disorder-avpd?query=personality%20disorders

¹¹⁷ Mark Zimmerman, MSD Manual, May 2021,

- 6. Feelings of discomfort or helplessness when they are alone because they fear they cannot take care of themselves
- An urgent need to establish a new relationship with someone who will provide care and support when a close relationship ends
- 8. Unrealistic preoccupation with fears of being left to take care of themselves

OBSESSIVE-COMPULSIVE PERSONALITY DISORDER

Because patients with obsessive-compulsive personality disorder need to be in control, they tend to be solitary in their endeavors and to mistrust the help of others.

For a diagnosis of obsessive-compulsive personality disorder under DSM-5, patients must have a persistent pattern of preoccupation with order; perfectionism; and control of self, others, and situations that begun in early adulthood. This pattern is shown by the presence of ≥ 4 of the following:

- 1. Preoccupation with details, rules, schedules, organization, and lists
- A striving to do something perfectly that interferes with completion of the task
- Excessive devotion to work and productivity (not due to financial necessity), resulting in neglect of leisure activities and friends
- 4. Excessive conscientiousness, fastidiousness, and inflexibility regarding ethical and moral issues and values
- 5. Unwillingness to throw out worn-out or worthless objects, even those with no sentimental value
- 6. Reluctance to delegate or work with other people unless those people agree to do things exactly as the patients want
- A miserly approach to spending for themselves and others because they see money as something to be saved for future disasters
- 8. Rigidity and stubbornness