04 - Conditions for Further Study

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Conditions for Further Study Proposed criteria sets are presented for conditions on which future research is encouraged. It is hoped that such research will allow the field to better understand these conditions and inform future decisions about possible placement in forthcoming editions of DSM. Notably, persistent complex bereavement disorder, originally located in this section, has been moved to the chapter “Trauma- and Stressor-Related Disorders” as an official diagnosis in Section II. On the basis of thorough reviews finding sufficient evidence of validity, reliability, and clinical utility to justify its new placement, it is now named “prolonged grief disorder” and the criteria have been appropriately reformulated. The specific items, thresholds, and minimum durations contained in these research criteria sets were set by expert consensus—informed by literature review, data reanalysis, and field trial results, where available—and are intended to provide a common language for researchers and clinicians who are interested in studying these disorders. The DSM-5 Task Force and Work Groups subjected each of these proposed criteria sets to a careful empirical review and invited wide commentary from the field as well as from the general public. The Task Force ultimately determined that there was insufficient evidence to warrant inclusion of these proposals as official mental disorder diagnoses in Section II of DSM-5. These proposed criteria sets are therefore not intended for clinical use; only the criteria sets and disorders in Section II of DSM-5 are officially recognized and should be used for clinical purposes. Attenuated Psychosis Syndrome Proposed Criteria A. At least one of the following symptoms is present and is of sufficient severity or frequency to warrant clinical attention:

1. Attenuated delusions.
2. Attenuated hallucinations.
3. Attenuated disorganized speech. B. Symptom(s) must have been present at least once per week for the past month. C. Symptom(s) must have begun or worsened in the past year. D. Symptom(s) is sufficiently distressing and disabling to the individual to warrant clinical attention. E. Symptom(s) is not better explained by another mental disorder, including a depressive or bipolar disorder with psychotic features, and is not attributable to

the physiological effects of a substance or another medical condition. F. Criteria for any psychotic disorder have never been met. Diagnostic Features Attenuated psychotic symptoms, as defined in Criterion A, are psychosis-like but below the threshold to be considered a psychotic symptom that would count toward the diagnosis of a psychotic disorder. Compared with full psychotic disorders, the symptoms are less severe and more transient. Moreover, the individual maintains reasonable insight into the psychotic-like experiences and generally appreciates that perceptions are altered, and magical ideation is not compelling. Attenuated psychosis does not have the fixed nature that is necessary for the diagnosis of a full-blown psychotic disorder. In attenuated psychosis, doubt about beliefs can be elicited, skepticism about perceptions can be induced, and insight can be tested using open-ended questions, such as “I see that this is how you experience the world—could there be a different explanation?” A diagnosis of attenuated psychosis syndrome requires state psychopathology associated with functional impairment rather than long-standing trait pathology. The psychopathology has not progressed to full psychotic severity. Changes in experiences and behaviors are noted by the individual or others, suggesting a clinically significant change in mental state (i.e., the symptoms are of sufficient severity or frequency to warrant clinical attention) (Criterion A). Attenuated delusions (Criterion A1) may have suspiciousness/persecutory ideational content, including persecutory ideas of reference. The individual may have a guarded, distrustful attitude. When this type of attenuated delusion is moderate in severity, the individual views others as untrustworthy and may be hypervigilant or sense ill will in others. When the attenuated delusions are severe but below the threshold to be considered psychotic, the individual entertains loosely organized beliefs about danger or hostile intention. Guarded behavior in the interview can interfere with the ability to gather information, and the propensity for viewing the world as hostile and dangerous is strong. On the other hand, attenuated delusions may have grandiose content presenting as an unrealistic sense of superior capacity. When this type of attenuated delusion is moderate in severity, the individual harbors notions of being gifted, influential, or special. When the attenuated delusions are severe, the individual has beliefs of superiority that often alienate friends and worry relatives. Thoughts of being special may lead to unrealistic plans and investments. Attenuated hallucinations (Criterion A2) include alterations in sensory perceptions, usually auditory and/or visual. When the attenuated hallucinations are moderate, the sounds and images are often unformed (e.g., shadows, trails, halos, murmurs, rumbling), and they are experienced as unusual or puzzling. When the attenuated hallucinations are severe, these experiences become more vivid and frequent (i.e., recurring illusions or hallucinations that capture attention and affect thinking and concentration). These perceptual abnormalities may disrupt behavior, but skepticism about their reality can still be induced. Attenuated disorganized communication (Criterion A3) may manifest as odd speech (vague, metaphorical, overelaborate, stereotyped), unfocused speech (confused, muddled, too fast or too slow, wrong words, irrelevant context, off track), or meandering speech (circumstantial,

tangential). When the disorganization is moderately severe, the individual frequently gets into irrelevant topics but responds easily to clarifying questions. Speech becomes meandering and circumstantial and may be odd but understandable. When the disorganization is severe, the individual fails to get to the point without external guidance (tangential). At a more severe level, some thought blocking or loose associations may occur infrequently, especially when the individual is under pressure, but reorienting questions quickly return structure and organization to the conversation. The individual must experience distress and/or impaired performance in social or role functioning (Criterion D), and the individual or responsible others must note the changes and

express concern, such that clinical care is indicated (Criterion A). Measures are available to determine whether Criteria A–E are met or to broadly identify a clinical high-risk state for psychosis. Associated Features The individual may experience magical thinking, difficulty in concentration, some disorganization in thought or behavior, excessive suspiciousness, anxiety, social withdrawal, and disruption in sleep-wake cycle. Impaired cognitive function and negative symptoms are often observed. Neuroimaging variables distinguish cohorts with attenuated psychosis syndrome from normal control cohorts with patterns similar to, but less severe than, that observed in schizophrenia. However, neuroimaging data are not diagnostic at the individual level. Prevalence Very little information is available about prevalence. However, in Switzerland, where one of the few relevant studies was conducted, the prevalence of attenuated psychosis syndrome in nonhelp-seeking individuals ages 16–40 years was found to be only 0.3%. Another 2.3% have attenuated symptoms that meet Criterion A, but these symptoms either began prior to the past year or had not worsened in the past year, as required by Criterion C. In up to 7% of the general population across a broad range of countries, individuals acknowledge experiencing attenuated delusions or hallucinations. While the prevalence of Criterion A symptoms can be higher or lower across countries or ethnonational groups, the prevalence of attenuated psychosis symptoms tends to be higher among migrant groups than among native populations, possibly due to higher exposure to trauma and discrimination. Development and Course Onset of attenuated psychosis syndrome is usually in mid-to-late adolescence or early adulthood. It may be preceded by normal development or evidence for impaired cognition, negative symptoms, or impaired social development. In help-seeking cohorts, those whose presentations met criteria for attenuated psychosis syndrome had an increased probability of developing psychosis compared with those whose presentations did not meet the criteria. In the group whose presentations met criteria, the 3-year cumulative risk was up to 22%, and in the group whose

Temperamental. Genetic and physiological. presentations did not meet criteria, the 3-year cumulative risk of psychosis was 1.54%. Factors predicting progression to a full psychotic disorder (most frequently schizophrenia spectrum disorder) include male sex, lifetime stress/trauma, unemployment, living alone, severity of attenuated positive psychotic symptoms, severity of negative symptoms, disorganized and cognitive symptoms, and poor functioning. Eleven percent of those attenuated psychosis syndrome cases that progress to full psychosis develop affective psychosis (depressive or bipolar disorder with psychotic features), whereas 73% of attenuated psychosis syndrome cases that progress to full psychosis develop a schizophrenia spectrum disorder. Most evidence has validated attenuated psychotic symptom criteria in individuals ages 12–35 years, but there is only limited evidence in the youngest. Although the highest risk for transition to psychosis is within the first 2 years, individuals continue to be at risk for up to 10 years after initial referral, with an overall risk of transition of 34.9% over a 10-year period. Individuals presenting with attenuated psychosis syndrome may display other poor clinical outcomes beyond the development of psychosis, such as persistent attenuated psychotic symptoms, persistent or recurrent comorbid mental disorders, disability, and low functioning. Clinical remission is present in only one-third of individuals with attenuated psychosis syndrome. Overall, about one-third of these individuals would develop psychosis, one-third would remit, and one-third would present persistent disability. Risk and Prognostic Factors Factors predicting prognosis of attenuated psychosis syndrome have not been definitively characterized. In individuals whose symptoms meet criteria for attenuated psychosis syndrome, there is no evidence that a family history of psychosis increases the risk of psychosis compared with control subjects

over a 4-year period. Structural, functional, electrophysiological, and neurochemical imaging data are associated with increased risk of transition to psychosis. However, these predictors have not yet been validated for clinical use. Culture-Related Diagnostic Issues Assessing the presence of attenuated symptoms without considering the impact of sociocultural context can be difficult. Some perceptual experiences (e.g., hearing noises, seeing shadows) and religious or supernatural beliefs (e.g., evil eye, causing illness through curses, influence of spirits) may be considered odd in some cultural contexts and accepted in others. In addition, populations that experience trauma or persecution (e.g., torture, political violence, racism, discrimination) can report symptoms and fears that may be misjudged as attenuated or frank paranoid delusions, because of the impact of trauma on the individual's mood and communication (e.g., some fears may be appropriate to avoid threats, and may commingle with fears of recurrence of trauma or posttraumatic symptoms). Groups at higher risk of misdiagnosis include migrants, socially oppressed ethnic and racialized populations, and other groups facing social adversity and discrimination. The distress and impairment criterion helps to distinguish socioculturally normative experiences from symptoms of attenuated psychosis syndrome (e.g., adaptive wariness toward authority figures by discriminated groups, which may be confused with

Brief psychotic disorder. Schizotypal personality disorder. Reality distortions occurring in other mental disorders. Adjustment reaction of adolescence. Extreme end of perceptual aberration and magical thinking in the non-ill population. Substance/medication-induced psychotic disorder. Attention-deficit/hyperactivity disorder. paranoia). Functional Consequences of Attenuated Psychosis Syndrome Many individuals may experience functional impairments at presentation. Modest-to-moderate impairment in social and role functioning may persist even with abatement of symptoms. Differential Diagnosis When symptoms of attenuated psychosis syndrome initially manifest, they may resemble symptoms of brief psychotic disorder. However, in attenuated psychosis syndrome, the attenuated symptoms (delusions, hallucinations, or disorganized speech) do not cross the psychosis threshold. Symptomatic features of schizotypal personality disorder, particularly during early stages of presentation, are similar to those of attenuated psychosis syndrome. However, schizotypal personality disorder is a relatively stable trait disorder not meeting the state-dependent aspects (Criterion C) of attenuated psychosis syndrome. In addition, a broader array of symptoms is required for the diagnosis of schizotypal personality disorder. Reality distortions that can resemble attenuated delusions can occur in the context of other mental disorders (e.g., feelings of low selfesteem or attributions of low regard from others in the context of major depressive disorder, a feeling of being the focus of undesired attention in the context of social anxiety disorder, inflated self-esteem in the context of pressured speech and reduced need for sleep in bipolar I or bipolar II disorder, a sense of being unable to experience feelings in the context of an intense fear of real or imagined abandonment and recurrent self-mutilation in borderline personality disorder). If these reality distortions occur only during the course of another mental disorder, an additional diagnosis of attenuated psychosis syndrome would not be made. Mild, transient symptoms typical of normal development and consistent with the degree of stress experienced do not qualify for attenuated psychosis syndrome. This diagnostic possibility should be strongly entertained when reality distortions are not associated with distress and functional impairment and need for care. Attenuated delusions and attenuated hallucinations can occur in the context of intoxication with cannabis, hallucinogens, phencyclidine, inhalants, and stimulants, or during withdrawal from alcohol and sedatives, hypnotics, or anxiolytics. Attenuated psychosis syndrome should not be diagnosed if the attenuated psychotic symptoms occur only during

substance use, in which case a diagnosis of substance/medication-induced psychotic disorder may be preferred. A history of attentional impairment does not exclude a current attenuated psychosis syndrome diagnosis. Earlier attentional impairment may be a

prodromal condition or comorbid attention-deficit/hyperactivity disorder. Comorbidity Most individuals with attenuated psychosis syndrome experience some comorbid mental disorder, mostly depression (41%) and/or anxiety (15%). A little more than half of individuals have at least one comorbid disorder at follow-up, most of which were present when the individual was first assessed; the persistence of comorbid disorders at follow-up is associated with poor clinical and functional outcomes. Although some individuals with an attenuated psychosis syndrome diagnosis will progress to developing a new diagnosis, including anxiety, depressive, bipolar, and personality disorders, individuals with attenuated psychosis syndrome are not at increased risk of developing new nonpsychotic disorders compared with help-seeking control subjects. Depressive Episodes With Short-Duration Hypomania Proposed Criteria Lifetime experience of at least one major depressive episode meeting the following criteria: A. Five (or more) of the following criteria have been present during the same 2week period and represent a change from previous functioning; at least one of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure. (Note: Do not include symptoms that are clearly attributable to a medical condition.)

1. Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g., feels sad, empty, or hopeless) or observation made by others (e.g., appears tearful). (Note: In children and adolescents, can be irritable mood.)
2. Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3. Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (Note: In children, consider failure to make expected weight gain.)
4. Insomnia or hypersomnia nearly every day.
5. Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6. Fatigue or loss of energy nearly every day.
7. Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8. Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others).
9. Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide. B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. C. The disturbance is not attributable to the physiological effects of a substance or another medical condition. D. The disturbance is not better explained by schizoaffective disorder and is not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or other specified or unspecified schizophrenia spectrum and other psychotic disorder. At least two lifetime episodes of hypomanic periods that involve the required criterion symptoms below but are of insufficient duration (at least 2 days but less than 4 consecutive days) to meet criteria for a hypomanic episode. The criterion symptoms are as follows: A. A distinct period of

abnormally and persistently elevated, expansive, or irritable mood and abnormally and persistently increased activity or energy. B. During the period of mood disturbance and increased energy and activity, three (or more) of the following symptoms have persisted (four if the mood is only irritable), represent a noticeable change from usual behavior, and have been present to a significant degree:

10. Inflated self-esteem or grandiosity.
11. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep).
12. More talkative than usual or pressured to keep talking.
13. Flight of ideas or subjective experience that thoughts are racing.
14. Distractibility (i.e., attention too easily drawn to unimportant or irrelevant external stimuli), as reported or observed.
15. Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation.
16. Excessive involvement in activities that have a high potential for painful consequences (e.g., the individual engages in unrestrained buying sprees, sexual indiscretions, or foolish business investments). C. The episode is associated with an unequivocal change in functioning that is uncharacteristic of the individual when not symptomatic. D. The disturbance in mood and the change in functioning are observable by

Genetic and physiological. others. E. The episode is not severe enough to cause marked impairment in social or occupational functioning or to necessitate hospitalization. If there are psychotic features, the episode is, by definition, manic. F. The episode is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication or other treatment). Diagnostic Features Individuals with depressive episodes with short-duration hypomania have experienced at least one major depressive episode as well as at least two episodes of 2–3 days' duration in which criteria for a hypomanic episode were met (except for symptom duration). These episodes are of sufficient intensity to be categorized as a hypomanic episode but do not meet the 4-day duration requirement. Symptoms are present to a significant degree, such that they represent a noticeable change from the individual's normal behavior. An individual with a history of a syndromal hypomanic episode and a major depressive episode by definition has bipolar II disorder, regardless of current duration of hypomanic symptoms. Associated Features Individuals who have experienced both short-duration hypomania and a major depressive episode, with their increased psychiatric comorbidity, greater family history of bipolar disorder, earlier onset, more recurrent major depressive episodes, and higher rate of suicide attempts, more closely resemble individuals with bipolar disorder than those with major depressive disorder. Prevalence The prevalence of depressive episodes with short-duration hypomania is unclear, as epidemiological studies have yet to be published using the DSM-5 definition. Using somewhat different criteria (subthreshold hypomania defined by either of the following: duration shorter than 4 days or having fewer than three Criterion B symptoms), major depressive disorder with subthreshold hypomania occurs in up to 6.7% of the U.S. population, making it more common than bipolar I or II disorder. In clinical settings studied across diverse countries, however, depressive episodes with short-duration hypomania is about one-fourth as common as depressive episodes with full-duration hypomania. Depressive episodes with short-duration hypomania may be more common in women, who may present with more features of atypical depression. Risk and Prognostic Factors A family history of bipolar disorder is three to four times more common among individuals with depressive episodes with short-duration hypomania than among those with major depressive disorder, whereas family

history of bipolar disorder is similar among individuals with depressive episodes and short- versus full-duration hypomania.

Bipolar II disorder. Major depressive disorder. Major depressive disorder with mixed features. Bipolar I disorder. Cyclothymic disorder. Association With Suicidal Thoughts or Behavior Individuals with depressive episodes with short-duration hypomania have higher rates of suicide attempts than individuals with major depressive disorder and similar rates of suicide attempts compared with individuals with depressive episodes and full-duration hypomania (bipolar II disorder). Functional Consequences of Short-Duration Hypomania Functional impairments associated specifically with depressive episodes with short-duration hypomania are as yet not fully determined. However, research suggests that individuals with this disorder have similar global assessment of functioning scores as compared to those with depressive episodes with full-duration hypomania. Differential Diagnosis Bipolar II disorder is characterized by major depressive episodes and hypomanic episodes, whereas depressive episodes with short-duration hypomania are characterized by depressive episodes with periods of 2–3 days of hypomanic symptoms. Once an individual has experienced a full-blown hypomanic episode lasting 4 days or more in addition to lifetime major depressive episodes, the diagnosis changes to and remains bipolar II disorder regardless of the duration of future hypomanic symptom periods. Major depressive disorder is also characterized by at least one lifetime major depressive episode. However, the additional presence of at least two lifetime periods of 2– 3 days of hypomanic symptoms leads to a diagnosis of depressive episodes with short-duration hypomania rather than to major depressive disorder. Both major depressive disorder with mixed features and depressive episodes with short-duration hypomania are characterized by the presence of some hypomanic symptoms and a major depressive episode. However, major depressive disorder with mixed features is characterized by hypomanic features that manifest concurrently with a major depressive episode, whereas individuals with depressive episodes with short-duration hypomania experience subsyndromal hypomania and fully syndromal major depression at different times. Bipolar I disorder is differentiated from depressive episodes with shortduration hypomania by at least one lifetime manic episode, which is longer (at least 1 week) and more severe (causing marked impairment in social or occupational functioning or necessitating hospitalization to prevent harm to self and others) than a hypomanic episode. An episode (of any duration) that involves psychotic symptoms or necessitates hospitalization is by definition a manic episode rather than a hypomanic one. While cyclothymic disorder is characterized by periods of depressive symptoms and periods of hypomanic symptoms, the lifetime presence of a major depressive episode precludes the diagnosis of cyclothymic disorder.

Caffeine Use Disorder Proposed Criteria A problematic pattern of caffeine use leading to clinically significant impairment or distress, as manifested by at least the first three of the following criteria occurring within a 12-month period:

1. A persistent desire or unsuccessful efforts to cut down or control caffeine use.
2. Continued caffeine use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by caffeine.
3. Withdrawal, as manifested by either of the following: a. The characteristic withdrawal syndrome for caffeine. b. Caffeine (or a closely related substance) is taken to relieve or avoid withdrawal symptoms.
4. Caffeine is often taken in larger amounts or over a longer period than was intended.

5. Recurrent caffeine use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated tardiness or absences from work or school related to caffeine use or withdrawal).
6. Continued caffeine use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of caffeine (e.g., arguments with spouse about consequences of use, medical problems, cost).
7. Tolerance, as defined by either of the following: a. A need for markedly increased amounts of caffeine to achieve desired effect. b. Markedly diminished effect with continued use of the same amount of caffeine.
8. A great deal of time is spent in activities necessary to obtain caffeine, use caffeine, or recover from its effects.
9. Craving or a strong desire or urge to use caffeine. Various research studies have provided documentation and characterization of individuals with problematic caffeine use, and several reviews provide an analysis of this literature. The working diagnostic algorithm proposed for the study of caffeine use disorder differs from that of the other substance use disorders, reflecting the need to identify only cases that have sufficient clinical importance to warrant the labeling of a mental disorder. A key goal of including caffeine use disorder in this section of DSM-5 is to stimulate research that will determine the reliability, validity, and prevalence of caffeine use disorder based on the proposed diagnostic schema, with particular attention to the association of the diagnosis with functional impairments as part of validity testing.

The proposed criteria for caffeine use disorder reflect the need for a diagnostic threshold higher than that used for the other substance use disorders. Such a threshold is intended to prevent overdiagnosis of caffeine use disorder due to the high rate of habitual nonproblematic daily caffeine use in the general population. Diagnostic Features Caffeine use disorder is characterized by the continued use of caffeine and failure to control use despite negative physical and/or psychological consequences. In two U.S. population surveys, 14%–17% of caffeine users endorsed caffeine use despite physical or psychological problems, 34%–45% reported a persistent desire or unsuccessful efforts to control caffeine use, and 18%– 27% reported withdrawal or using caffeine to relieve or avoid withdrawal. In these same surveys, some caffeine users reported using more caffeine than intended, spending a great deal of time using or obtaining caffeine (e.g., drinking coffee all day and until the evening), tolerance, a strong desire or craving for caffeine, failure to fulfill major role obligations due to caffeine (e.g., spending family vacation time searching for caffeinated beverages, resulting in relationship distress; repeatedly late for work due to need to get coffee), and, to a much lesser extent, caffeine use despite social or interpersonal problems. Medical and psychological problems attributed to caffeine included heart, stomach, and urinary problems, and complaints of anxiety, depression, insomnia, irritability, and difficulty thinking. In a study of 2,259 Hungarian caffeine consumers, factor analysis of the nine caffeine use disorder criteria resulted in a one-factor solution, suggesting that caffeine use disorder is a unitary construct. In two Baltimore-area caffeine treatment studies, the most commonly endorsed criteria were withdrawal (97%), persistent desire or unsuccessful efforts to control use (91%– 94%), and use despite knowledge of physical or psychological problems caused by caffeine (75%–91%). Among individuals seeking treatment for problematic caffeine use, 88% reported having made prior serious attempts to modify caffeine use, and 43%–47% reported having been advised by a medical professional to reduce or eliminate caffeine. Common reported reasons for modifying

caffeine use were health-related (59%) and a desire to not be dependent on caffeine (35%). The text for caffeine withdrawal in the Section II chapter “Substance-Related and Addictive Disorders” provides information on the features of the withdrawal criterion. It is well documented that habitual caffeine users can experience a well-defined withdrawal syndrome upon acute abstinence from caffeine, and many caffeine-dependent individuals report continued use of caffeine to avoid experiencing withdrawal symptoms. Prevalence The prevalence of caffeine use disorder in the general population is unclear. One populationbased study in Vermont reported that 9% of individuals endorsed the three proposed DSM-5 caffeine use disorder criteria plus tolerance. In a sample of 1,006 caffeine-consuming adults recruited using demographic quotas to reflect the U.S. population, 8% endorsed all three criteria required for a caffeine use disorder diagnosis.

Genetic and physiological. In a sample of caffeine-consuming adolescents presenting for routine medical care in a Boston hospital, 3.9% endorsed all three criteria required for a caffeine use disorder diagnosis. Among a convenience sample of caffeine consumers in Hungary, 13.9% endorsed all three criteria, with 4.3% of those reporting that the symptoms caused significant distress in their everyday life. Development and Course Individuals whose pattern of use meets criteria for a caffeine use disorder have shown a wide range of daily caffeine intake and have been consumers of various types of caffeinated products (e.g., coffee, soft drinks, tea, energy drinks) and medications. A diagnosis of caffeine use disorder has been shown to prospectively predict a greater incidence of caffeine reinforcement and more severe withdrawal. There has been no longitudinal or cross-sectional lifespan research on caffeine use disorder. Caffeine use disorder has been identified in both adolescents and adults. Rates of caffeine consumption and overall level of caffeine consumption in the United States tend to increase with age. Age-related factors for caffeine use disorder are unknown, although concern is growing related to excessive caffeine consumption among adolescents and young adults through use of caffeinated energy drinks. Risk and Prognostic Factors Heritabilities of heavy caffeine use, caffeine tolerance, and caffeine withdrawal range from 35% to 77%. For caffeine use, alcohol use, and cigarette smoking, a common genetic factor (polysubstance use) underlies the use of these three substances, with 28%–41% of the heritable effects of caffeine use (or heavy use) shared with alcohol and smoking. Caffeine and tobacco use and use disorders are associated with and substantially influenced by genetic factors unique to these licit drugs. The magnitude of heritability for caffeine use disorder markers appears to be similar to that for alcohol and tobacco use disorder markers. Culture-Related Diagnostic Issues Consumption of caffeine is affected by geographic origin, cultural context, lifestyle, social behavior, and economic status. The type of caffeinated beverage preferred (e.g., tea; coffee; carbonated sodas containing caffeine; mate [a beverage made from the herb yerba mate]) and the mode of preparation vary globally, leading to marked differences in the amounts and types of compounds in a “cup” of coffee, tea, or mate. These differences must be considered when assessing the quantity of caffeine ingested. Association With Suicidal Thoughts or Behavior No research specifically addresses the relationship between caffeine use disorder and suicidal thoughts or behavior. There is contradictory evidence regarding caffeine consumption; namely, that high levels of caffeine consumption either may be associated with increased risk for suicidal thoughts or behavior or may be protective for suicidal thoughts or behavior.

Nonproblematic use of caffeine. Other stimulant use disorder. Anxiety disorders. Functional Consequences of Caffeine Use Disorder One U.S. population survey found that those who fulfilled the criteria for caffeine use disorder were more likely to report greater caffeine-related distress,

feeling bad or guilty about caffeine use, sleep problems, anxiety, depression, and stress. A greater number of total symptoms endorsed also predicted these negative outcomes. Caffeine use disorder may predict greater use of caffeine during pregnancy. Differential Diagnosis The distinction between nonproblematic use of caffeine and caffeine use disorder can be difficult to make because social, behavioral, or psychological problems may be difficult to attribute to the substance, especially in the context of use of other substances. Regular, heavy caffeine use that can result in tolerance and withdrawal is relatively common, which by itself should not be sufficient for making a diagnosis. Problems related to use of other stimulant medications or substances may approximate the features of caffeine use disorder. Chronic heavy caffeine use may mimic generalized anxiety disorder, and acute caffeine consumption may produce and mimic panic attacks. Comorbidity Comorbidities associated with caffeine use disorder include daily cigarette smoking, cannabis use disorder, and a family or personal history of alcohol use disorder. Compared with individuals in the general population, rates of caffeine use disorder are higher among those seeking treatment for problematic caffeine use; individuals who use tobacco; high school and college students; and those with histories of alcohol or illicit drug misuse. Features of caffeine use disorder may be positively associated with several diagnoses: major depression, generalized anxiety disorder, panic disorder, antisocial personality disorder, and alcohol, cannabis, and cocaine use disorders. Internet Gaming Disorder Proposed Criteria Persistent and recurrent use of the Internet to engage in games, often with other players, leading to clinically significant impairment or distress as indicated by five (or more) of the following in a 12-month period:

1. Preoccupation with Internet games. (The individual thinks about previous gaming activity or anticipates playing the next game; Internet gaming becomes the dominant activity in daily life.) Note: This disorder is distinct from Internet gambling, which is included under gambling disorder.
2. Withdrawal symptoms when Internet gaming is taken away. (These symptoms are typically described as irritability, anxiety, or sadness, but there are no physical signs of pharmacological withdrawal.)
3. Tolerance—the need to spend increasing amounts of time engaged in Internet games.
4. Unsuccessful attempts to control the participation in Internet games.
5. Loss of interests in previous hobbies and entertainment as a result of, and with the exception of, Internet games.
6. Continued excessive use of Internet games despite knowledge of psychosocial problems.
7. Has deceived family members, therapists, or others regarding the amount of Internet gaming.
8. Use of Internet games to escape or relieve a negative mood (e.g., feelings of helplessness, guilt, anxiety).
9. Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of participation in Internet games. Note: Only nongambling Internet games are included in this disorder. Use of the Internet for required activities in a business or profession is not included; nor is the disorder intended to include other recreational or social Internet use. Similarly, sexual Internet sites are excluded. Specify current severity: Internet gaming disorder can be mild, moderate, or severe depending on the degree of disruption of normal activities. Individuals with less severe Internet gaming disorder may exhibit fewer symptoms and less disruption of their lives. Those with severe Internet gaming disorder will have more hours spent on the computer and more severe loss of

> relationships or career or school opportunities. Gambling disorder is currently the only non-substance-related disorder included in the DSM5 Section II chapter “Substance-Related and Addictive Disorders.” However, there are other behavioral disorders that show some similarities to substance use disorders and gambling disorder for which the word addiction is commonly used in nonmedical settings, and the one condition with a considerable literature is the compulsive playing of Internet games. Internet gaming has been reportedly defined as an “addiction” by the Chinese government and is considered a public health threat in South Korea, where treatment and prevention systems have been set up. Reports of treatment of this condition have appeared in medical journals, mostly from Asian countries, but also in the United States and other high-income countries. The DSM-5 work group reviewed more than 240 articles and found some behavioral similarities of Internet gaming to gambling disorder and to substance use disorders. The literature suffers, however, from lack of a standard definition from which to derive prevalence data. An understanding of the natural histories of cases, with or without treatment, is also missing. The

literature does describe many underlying similarities to substance addictions, including aspects of tolerance, withdrawal, repeated unsuccessful attempts to cut back or quit, and impairment in normal functioning. Further, the seemingly high prevalence rates, both in Asian countries and in the West, justified inclusion of this disorder in Section III of DSM-5 and in the Mental, Behavioural, and Neurodevelopmental Disorders chapter in ICD-11. Note that since the publication of DSM-5, the number of clinical reports has continued to accumulate, but many of the issues remain unresolved. Internet gaming disorder has achieved significant public health importance, and additional research may eventually lead to evidence that Internet gaming disorder (also commonly referred to as Internet use disorder, Internet addiction, or gaming addiction) has merit as an independent disorder. As with gambling disorder, there should be epidemiological studies to determine prevalence, clinical course, possible genetic influence, and potential biological factors based on, for example, brain imaging data. Diagnostic Features The essential feature of Internet gaming disorder is a pattern of excessive and prolonged participation in Internet gaming that results in a cluster of cognitive and behavioral symptoms, including progressive loss of control over gaming, tolerance, and withdrawal symptoms, analogous to the symptoms of substance use disorders. These Internet-based games typically involve competition between groups of players who are often in different global regions, so that extended duration of play is encouraged by time-zone independence. Although Internet gaming disorder most often involves specific Internet games with multiplayer competition, it can include non-Internet computerized off-line games as well, although these have been less researched. The Internet gaming often includes a significant aspect of social interactions during play, and the team aspects of play appear to be a key motivation. Attempts to direct the individual toward schoolwork or interpersonal activities are strongly resisted. Individuals with Internet gaming disorder continue to sit at a computer and engage in gaming activities despite neglect of other activities. They typically devote 8–10 hours or more per day to this activity and at least 30 hours per week. If they are prevented from using a computer and returning to the game, they become agitated and angry. They often go for long periods without food or sleep. Normal obligations, such as school or work, or family obligations are neglected. Until the optimal criteria and threshold for diagnosis are determined empirically, conservative definitions ought to be used, such that diagnoses are considered for endorsement of five or more of nine criteria. Associated Features Although no consistent personality types associated with Internet gaming disorder have

been identified, negative affectivity, detachment, antagonism, disinhibition, and psychoticism have been associated with the disorder. Individuals with compulsive Internet gaming have demonstrated brain activation in specific regions triggered by exposure to the Internet game but not limited to reward system structures.

Environmental. Genetic and physiological. Prevalence The mean prevalence of 12-month Internet gaming disorder is estimated as 4.7% across multiple countries, with a range of 0.7% to 15.6% across studies. Research using the DSM-5 proposed criteria suggests that prevalence is similar in Asian and Western countries. In the United States, based on large Internet-based surveys, the prevalence of DSM-5 Internet gaming disorder is 1% or lower. An international meta-analysis of 16 studies found a pooled prevalence of Internet gaming disorder among adolescents of 4.6%, with adolescent boys/men generally reporting a higher prevalence rate (6.8%) than adolescent girls/women (1.3%). Risk and Prognostic Factors Computer availability with Internet connection allows access to the types of games with which Internet gaming disorder is most often associated. Adolescent men seem to be at greatest risk of developing Internet gaming disorder. Sex- and Gender-Related Diagnostic Issues Internet gaming disorder appears to be more common in adolescent and young adult men than adolescent and young adult women. Adolescent boys ages 12–15 years also may be at greater risk of adverse effects of disordered gaming (e.g., lower school grades, loneliness). There may also be gender differences in the types of games played, in that adolescent girls ages 12–15 tend to choose games that include puzzles, music, and social and educational themes, whereas adolescent boys of the same age more often choose action, fighting, strategy, and role-playing games that may have greater addictive potential. Association With Suicidal Thoughts or Behavior Few studies specifically address suicide in individuals diagnosed with Internet gaming disorder, but studies on a broader phenotype of problematic Internet and online gaming behaviors are available. A nationally representative household survey of Australian youth ages 11–17 years (Young Minds Matter) found that problem Internet and online gaming behavior was associated with higher risk of suicide attempt in the prior year. After controlling for demographics, depression, family support, and self-esteem, a survey study of 9,510 Taiwanese students ages 12–18 years found that Internet addiction, including online gaming, was associated with suicidal thoughts and suicide attempt. In a representative sample of 8,807 students from randomly selected European schools, 3.62% had Internet gaming disorder (using DSM-5 criteria), and 3.11% of the students were considered to have pathological Internet use but were not gamers. Both groups showed similarly increased risks for emotional symptoms, conduct disorder, hyperactivity/inattention, self-injurious behaviors, and suicidal thoughts and behavior. The mental health effects of problematic Internet use, including suicidal thoughts or behavior, appear to be related to and perhaps mediated by the impact of problematic Internet use on sleep. Functional Consequences of Internet Gaming Disorder

Internet gaming disorder may lead to school failure, job loss, or marriage failure. The compulsive gaming behavior tends to crowd out normal social, scholastic, and family activities. Students may show declining grades and eventually failure in school. Family responsibilities may be neglected. Differential Diagnosis Excessive use of the Internet not involving playing of online games (e.g., excessive use of social media, such as Facebook; viewing pornography online) is not considered analogous to Internet gaming disorder, and future research on other excessive uses of the Internet would need to follow similar guidelines as suggested herein. Excessive gambling online may qualify for a separate diagnosis of gambling disorder. Comorbidity Health may be neglected due to

compulsive gaming. Other diagnoses that may be associated with Internet gaming disorder include major depressive disorder, ADHD, and obsessivecompulsive disorder. Neurobehavioral Disorder Associated With Prenatal Alcohol Exposure Proposed Criteria A. More than minimal exposure to alcohol during gestation, including prior to pregnancy recognition. Confirmation of gestational exposure to alcohol may be obtained from maternal self-report of alcohol use in pregnancy, medical or other records, or clinical observation. B. Impaired neurocognitive functioning as manifested by one or more of the following:

1. Impairment in global intellectual performance (i.e., IQ of 70 or below, or a standard score of 70 or below on a comprehensive developmental assessment).
2. Impairment in executive functioning (e.g., poor planning and organization; inflexibility; difficulty with behavioral inhibition).
3. Impairment in learning (e.g., lower academic achievement than expected for intellectual level; specific learning disability).
4. Memory impairment (e.g., problems remembering information learned recently; repeatedly making the same mistakes; difficulty remembering lengthy verbal instructions).
5. Impairment in visual-spatial reasoning (e.g., disorganized or poorly planned drawings or constructions; problems differentiating left from right). C. Impaired self-regulation as manifested by one or more of the following:
6. Impairment in mood or behavioral regulation (e.g., mood lability; negative affect or irritability; frequent behavioral outbursts).
7. Attention deficit (e.g., difficulty shifting attention; difficulty sustaining mental effort).
8. Impairment in impulse control (e.g., difficulty waiting turn; difficulty complying with rules). D. Impairment in adaptive functioning as manifested by two or more of the following, one of which must be (1) or (2):
9. Communication deficit (e.g., delayed acquisition of language; difficulty understanding spoken language).
10. Impairment in social communication and interaction (e.g., overly friendly with strangers; difficulty reading social cues; difficulty understanding social consequences).
11. Impairment in daily living skills (e.g., delayed toileting, feeding, or bathing; difficulty managing daily schedule).
12. Impairment in motor skills (e.g., poor fine motor development; delayed attainment of gross motor milestones or ongoing deficits in gross motor function; deficits in coordination and balance). E. Onset of the disorder (symptoms in Criteria B, C, and D) occurs in childhood. F. The disturbance causes clinically significant distress or impairment in social, academic, occupational, or other important areas of functioning. G. The disorder is not better explained by the direct physiological effects associated with postnatal use of a substance (e.g., a medication, alcohol or other drugs), a general medical condition (e.g., traumatic brain injury, delirium, dementia), another known teratogen (e.g., fetal hydantoin syndrome), a genetic condition (e.g., Williams syndrome, Down syndrome, Cornelia de Lange syndrome), or environmental neglect. Alcohol is a neurobehavioral teratogen, and prenatal alcohol exposure has teratogenic effects on central nervous system (CNS) development and subsequent function. Neurobehavioral disorder associated with prenatal alcohol exposure (ND-PAE) is a new clarifying term, intended to encompass the full range of developmental disabilities associated with exposure to alcohol in utero. ND-PAE may be

diagnosed both in the absence and in the presence of the physical effects of prenatal alcohol exposure (e.g., facial dysmorphology required for a diagnosis of fetal alcohol syndrome). Diagnostic Features The essential features of ND-PAE are the manifestation of impairment in neurocognitive,

behavioral, and adaptive functioning associated with prenatal alcohol exposure. Impairment can be documented based on past diagnostic evaluations (e.g., psychological or educational assessments) or medical records, reports by the individual or informants, and/or observation by a clinician. A clinical diagnosis of fetal alcohol syndrome, including specific prenatal alcohol-related facial dysmorphology and growth retardation, can be used as evidence of significant levels of prenatal alcohol exposure; specific guidelines for facial dysmorphology have been developed for diverse ethnoracial physiognomies. Although both animal and human studies have documented adverse effects of lower levels of drinking, identifying how much prenatal exposure is needed to significantly impact neurodevelopmental outcome remains challenging. Data suggest that a history of more than minimal gestational exposure prior to pregnancy recognition and/or following pregnancy recognition may be required. More than minimal exposure is defined as greater than 13 drinks per month during pregnancy or more than 2 drinks on any one occasion. Identifying a minimal threshold of drinking during pregnancy will require consideration of a variety of factors known to affect exposure and/or interact to influence developmental outcomes, including stage of prenatal development, gestational smoking, maternal and fetal genetics, and maternal physical status (i.e., age, health, and certain obstetric problems). Symptoms of ND-PAE include marked impairment in global intellectual performance (IQ) or neurocognitive impairments in any of the following areas: executive functioning, learning, memory, and/or visual-spatial reasoning. Impairments in self-regulation are present and may include impairment in mood or behavioral regulation, attention deficit, or impairment in impulse control. Finally, impairments in adaptive functioning include communication deficits and impairment in social communication and interaction. Impairment in daily living (self-help) skills and impairment in motor skills may be present. As it may be difficult to obtain an accurate assessment of the neurocognitive abilities of very young children, it is appropriate to defer a diagnosis for children 3 years of age and younger. Associated Features Associated features vary depending on age, degree of alcohol exposure, and the individual’s environment. An individual can be diagnosed with this disorder regardless of socioeconomic or cultural background. However, ongoing parental alcohol/substance misuse, parental mental illness, exposure to domestic or community violence, neglect or abuse, disrupted caregiving relationships, multiple out-of-home placements, and lack of continuity in medical or mental health care are often present. Prevalence In the United States, the prevalence of ND-PAE (encompassing fetal alcohol spectrum disorders) has been estimated as 15.2/1,000 (range: 11.3–50.0/1,000), with higher estimates derived when only children with full evaluations were included (31.1–98.5/1,000). When vulnerable subpopulations are considered, rates of ND-PAE can be much higher (e.g., among children in

Environmental. care settings, 251.5/1,000), according to a meta-analysis of data from multiple countries. In 2012, the mean global prevalence of fetal alcohol spectrum disorder in the general population was 7.7 per 1,000 individuals, with a prevalence of 8.8 per 1,000 in the region of the Americas (including the United States). Development and Course Among individuals with prenatal alcohol exposure, evidence of CNS dysfunction varies according to developmental stage. Although about one-half of young children prenatally exposed to alcohol show marked developmental delay

in the first 3 years of life, other children affected by prenatal alcohol exposure may not exhibit signs of CNS dysfunction until they are preschoolor school-age. Additionally, impairments in higher order cognitive processes (i.e., executive functioning), which are often associated with prenatal alcohol exposure, may be more easily assessed in older children. When children reach school age, learning difficulties, impairment in executive function, and problems with integrative language functions usually emerge more clearly, and both social skills deficits and challenging behavior may become more evident. In particular, as school and other requirements become more complex, greater deficits are noted. Because of this, the school years represent the ages at which a diagnosis of ND-PAE would be most likely. Risk and Prognostic Factors Low socioeconomic status and low educational level in the mother are risk factors for fetal alcohol syndrome. This association is related to social, structural, and psychological factors that may increase the risk of maternal drinking or worsen its impact, including social determinants of health, such as the high concentration of liquor stores in lowincome, ethnoracially segregated communities. Culture-Related Diagnostic Issues Socioeconomic and cultural factors affect the consumption of alcohol during pregnancy, which ranges globally from 0.2% in the Eastern Mediterranean region to 25.2% in the European region. Individuals belonging to ethnic groups that have higher proportions of certain alleles of alcoholmetabolizing enzymes (e.g., of aldehyde dehydrogenase 2) may be less likely to exhibit the effects of prenatal alcohol exposure. Association With Suicidal Thoughts or Behavior Suicide is a high-risk outcome, with rates increasing significantly in late adolescence and early adulthood. Analyses of the Canadian national fetal alcohol spectrum disorder (FASD) database show that among individuals with FASD who have impaired affect regulation, there is a markedly higher risk of suicidal thoughts or behavior. In an Alberta-based registry, it was found that individuals with fetal alcohol syndrome are at markedly increased risk for premature death, with 15% dying from suicide. In California, a study of 54 adolescents ages 13–18 years with

FASD also demonstrated markedly higher rates of suicidal thoughts and serious attempts (all by boys) compared with the general U.S. adolescent population. In a Canadian survey, the mothers of individuals with FASD were over six times as likely to die by suicide and almost five times more likely to attempt suicide after giving birth to a child with FASD compared with mothers whose child did not have FASD, suggesting that the increased rates of suicidal ideation and suicide attempts among youth with FASD may be mediated by family factors (genetic and/or environmental), in addition to any risk conferred by the FASD condition itself. Functional Consequences of Neurobehavioral Disorder Associated With Prenatal Alcohol Exposure The CNS dysfunction seen in individuals with ND-PAE often leads to decrements in adaptive behavior and to maladaptive behavior with lifelong consequences. Abnormalities have been associated with ND-PAE in multiple organ systems, including the heart, kidney, liver, gastrointestinal tract, and endocrine systems. Individuals affected by prenatal alcohol exposure have a higher prevalence of disrupted school experiences, poor employment records, trouble with the law, confinement (legal or psychiatric), and dependent living conditions. Differential Diagnosis Other considerations include maternal exposure to other substances during the prenatal period; poor prenatal care; the physiological effects of postnatal substance use, such as a medication, alcohol, or other substances; disorders due to another medical condition, such as traumatic brain injury or other neurocognitive disorders (e.g., delirium, major neurocognitive disorder [dementia]); and environmental neglect. Genetic conditions such as Williams syndrome, Down syndrome, or Cornelia de Lange syndrome and other teratogenic conditions such as fetal hydantoin syndrome and maternal phenylketonuria may have similar physical and behavioral characteristics. A careful review of prenatal exposure history is

needed to clarify the teratogenic agent, and an evaluation by a clinical geneticist may be needed to distinguish physical characteristics associated with these and other genetic conditions. Comorbidity Mental health problems have been identified in more than 90% of individuals with histories of significant prenatal alcohol exposure. The most common co-occurring diagnosis is attentiondeficit/hyperactivity disorder, but research has shown that individuals with ND-PAE differ in neuropsychological characteristics and in their responsiveness to pharmacological interventions. Other high- probability co-occurring disorders include oppositional defiant disorder and conduct disorder, but the appropriateness of these diagnoses should be weighed in the context of the significant impairments in general intellectual and executive functioning that are often associated with prenatal alcohol exposure. Mood symptoms, including symptoms of bipolar disorder and depressive disorders, have been described. History of prenatal alcohol exposure is associated with an increased risk for later tobacco, alcohol, and other substance use disorders.

Suicidal Behavior Disorder Proposed Criteria A. Within the last 24 months, the individual has made a suicide attempt. Note: A suicide attempt is a self-initiated sequence of behaviors by an individual who, at the time of initiation, expected that the set of actions would lead to his or her own death. (The “time of initiation” is the time when a behavior took place that involved applying the method.) B. The act does not meet criteria for nonsuicidal self-injury—that is, it does not involve self-injury directed to the surface of the body undertaken to induce relief from a negative feeling/cognitive state or to achieve a positive mood state. C. The diagnosis is not applied to suicidal ideation or to preparatory acts. D. The act was not initiated during a state of delirium or confusion. E. The act was not undertaken solely for a political or religious objective. Specify if: Current: Not more than 12 months since the last attempt. In early remission: 12–24 months since the last attempt. Note: ICD-10-CM codes to indicate whether suicidal behavior is part of the current clinical presentation (T14.91A for initial encounter and T14.91D for subsequent encounters) and/or whether there has been a prior history of suicidal behavior (Z91.51) are available for clinical use to accompany any DSM-5 diagnosis; in addition, the codes can be recorded in the absence of a DSM-5 diagnosis. The definition of these codes is included in Section II, “Other Conditions That May Be a Focus of Clinical Attention” (see “Suicidal Behavior”). Specifiers Suicidal behavior is often categorized in terms of violence of the method. Generally, overdoses with legal or illegal substances are considered nonviolent in method, whereas jumping, gunshot wounds, and other methods are considered violent. Another dimension for classification is medical consequences of the behavior, with high-lethality attempts being defined as those requiring medical hospitalization beyond a visit to an emergency department. An additional dimension considered includes the degree of planning versus impulsiveness of the attempt, a characteristic that might have consequences for the medical outcome of a suicide attempt. If the suicidal behavior occurred 12–24 months prior to evaluation, the condition is considered to be in early remission.

Diagnostic Features The essential manifestation of suicidal behavior disorder is a suicide attempt. A suicide attempt is a behavior that the individual has undertaken with at least some intent to die. The behavior might or might not lead to injury or serious medical consequences. Several factors can influence the medical consequences of the suicide attempt, including poor planning, lack of knowledge about the lethality of the method chosen, low intentionality or ambivalence, or chance intervention by others after the behavior has been initiated. These should not be considered in assigning the diagnosis. Determining the degree of intent can be challenging. Individuals might not acknowledge intent, especially in situations where doing so could result in hospitalization or cause

distress to loved ones. Markers of risk include degree of planning, including selection of a time and place to minimize rescue or interruption; the individual's mental state at the time of the behavior, with acute agitation being especially concerning; recent discharge from inpatient care; or recent discontinuation of a mood stabilizer such as lithium or an antipsychotic such as clozapine in the case of schizophrenia. Examples of environmental "triggers" include recently learning of a potentially fatal medical diagnosis such as cancer, experiencing the sudden and unexpected loss of a close relative or partner, loss of employment, or displacement from housing. Conversely, features such as talking to others about future events or preparedness to sign a contract for safety are less reliable indicators. In order for the criteria to be met, the individual must have made at least one suicide attempt. Suicide attempts can include behaviors in which, after initiating the suicide attempt, the individual changed his or her mind or someone intervened. For example, an individual might intend to ingest a given amount of medication or poison, but either stop or be stopped by another before ingesting the full amount. If the individual is dissuaded by another or changes his or her mind before initiating the behavior, the diagnosis should not be made. The acts qualifying for a diagnosis of suicidal behavior disorder should not have been initiated exclusively during a state of delirium or confusion. If the individual deliberately became intoxicated before initiating the suicidal behavior in order to reduce anticipatory anxiety and to minimize interference with the intended behavior, the diagnosis can still be made. Currently there are no clinical instruments that yield positive predictive values sufficient to make them useful tools for predicting suicidal behavior at the patient level. It is not surprising that single clinical or biological factors are poor indicators of suicide risk, because suicidal behavior emerges from a convergence of multiple risk factors. Moreover, given the clinical heterogeneity of suicidal behavior, it is likely that there are multiple pathways to suicidal behavior that can only be captured if this heterogeneity is considered. Similarly, numerous biomarkers have been studied, but no robust predictor has emerged. Development and Course Suicidal behavior disorder can occur at any time in the life span but is rarely seen in children under the age of 5. Approximately 25%–30% of persons who attempt suicide will go on to make more attempts. There is significant variability in terms of frequency, method, and lethality of attempts. However, this is not different from what is observed in other illnesses, such as major depressive disorder, in which frequency of episode, subtype of episode, and impairment for a given episode can vary significantly.

Genetic and physiological. Risk and Prognostic Factors The largest genome-wide association study of suicide attempt to date, from the Psychiatric Genomics Consortium, found that the genetic risk for depression increases the risk for suicide attempt across diagnostic cohorts with major depressive disorder, bipolar disorder, and schizophrenia. In other words, across diagnostic categories, attempters carry more risk alleles for depression than nonattempters, rather than simply for their primary psychiatric diagnosis. These results suggest that the genetic associations with suicide attempt are partly unique and partly shared with the genetic associations with depression. Culture-Related Diagnostic Issues Cultural contexts affect the frequency and form of suicidal behavior disorder, including variations in incidence and prevalence, methods used (e.g., poisoning with pesticides in lowincome countries; gunshot wounds in the southwestern United States), motivations, circumstances, and meanings. These patterns vary over time, by migrant or ethnic group, and by service setting. Culturally mediated social stressors and predicaments such as family breakdowns, perceived loss of dignity or interpersonal status, conflicting intergenerational roles and expectations due to differential acculturation, changing levels of sociocultural integration, stigma and self-stigma about suicide, and systemic discrimination and structural inequity

(institutionalized socioeconomic bias and oppression) may contribute to the risk of suicidal behavior disorder. Attitudes toward suicide and suicidal behaviors are influenced by historical, environmental, economic, political, legal, social, cultural, moral, and spiritual or religious factors. For example, in a longitudinal U.S. sample followed across generations, parental belief (self-identified as mostly Protestant and Catholic) in the importance of religion was associated with lower risk of suicidal behavior in their offspring, independent of an offspring's own belief about religious importance and other known parental factors, such as parental depression, suicidal behavior, and divorce. The reasons for suicide attempts and choice of suicide methods may have cultural significance, which may be associated with specific individual and social responses (e.g., of stigma, shame, or respect). Sex- and Gender-Related Diagnostic Issues Suicidal behavior disorder varies in prevalence and form across sex and gender. On average, suicides are about twice as common in men compared with women, although the prevalence ratio varies by country and cultural context. Estimates also vary because the intent of self-harm behaviors is not always clearly measured; however, suicidal behavior that does not result in death is more common in women than in men. Men generally use more lethal methods such as gunshots and hanging, whereas less lethal means such as self-poisoning are more common in women. The frequency of suicidal behaviors is higher in women (i.e., the average number of suicide attempts for a woman is generally higher than the average number for a man), but this could be explained by the more frequent use of less lethal methods among women. Suicide rates among individuals who identify as transgender are high, and transgender individuals are also at higher risk for suicidal behavior than cisgender individuals.

Diagnostic Markers Laboratory abnormalities consequent to the suicidal attempt are often evident. Suicidal behavior that leads to blood loss can be accompanied by anemia, hypotension, or shock. Overdoses might lead to coma or obtundation and associated laboratory abnormalities such as electrolyte imbalances. Comorbidity Suicidal behavior disorder is seen in the context of a variety of mental disorders, most commonly bipolar disorder, major depressive disorder, schizophrenia, schizoaffective disorder, anxiety disorders (in particular, panic disorders associated with catastrophic content and PTSD flashbacks), substance use disorders (especially alcohol use disorders), borderline personality disorder, antisocial personality disorder, eating disorders, and adjustment disorders. Nonsuicidal Self-Injury Disorder Proposed Criteria A. In the last year, the individual has, on 5 or more days, engaged in intentional self-inflicted damage to the surface of his or her body of a sort likely to induce bleeding, bruising, or pain (e.g., cutting, burning, stabbing, hitting, excessive rubbing), with the expectation that the injury will lead to only minor or moderate physical harm (i.e., there is no suicidal intent). Note: The absence of suicidal intent has either been stated by the individual or can be inferred by the individual's repeated engagement in a behavior that the individual knows, or has learned, is not likely to result in death. B. The individual engages in the self-injurious behavior with one or more of the following expectations:

1. To obtain relief from a negative feeling or cognitive state.
2. To resolve an interpersonal difficulty.
3. To induce a positive feeling state. Note: The desired relief or response is experienced during or shortly after the self-injury, and the individual may display patterns of behavior suggesting a dependence on repeatedly engaging in it. C. The intentional self-injury is associated with at least one of the following:

4. Interpersonal difficulties or negative feelings or thoughts, such as depression, anxiety, tension, anger, generalized distress, or self-criticism, occurring in the period immediately prior to the self-injurious act.
5. Prior to engaging in the act, a period of preoccupation with the intended

behavior that is difficult to control. 3. Thinking about self-injury that occurs frequently, even when it is not acted upon. D. The behavior is not socially sanctioned (e.g., body piercing, tattooing, part of a religious or cultural ritual) and is not restricted to picking a scab or nail biting. E. The behavior or its consequences cause clinically significant distress or interference in interpersonal, academic, or other important areas of functioning. F. The behavior does not occur exclusively during psychotic episodes, delirium, substance intoxication, or substance withdrawal. In individuals with a neurodevelopmental disorder, the behavior is not part of a pattern of repetitive stereotypies. The behavior is not better explained by another mental disorder or medical condition (e.g., psychotic disorder, autism spectrum disorder, intellectual developmental disorder [intellectual disability], Lesch-Nyhan syndrome, stereotypic movement disorder with self-injury, trichotillomania [hair-pulling disorder], excoriation [skin-picking] disorder). Note: ICD-10-CM codes to indicate whether nonsuicidal self-injury is part of the current clinical presentation (R45.88) and/or whether there has been a prior history of nonsuicidal self-injury (Z91.52) are available for clinical use to accompany any DSM-5 diagnosis; in addition, the codes can be recorded in the absence of a DSM-5 diagnosis. The definition of these codes is included in Section II, “Other Conditions That May Be a Focus of Clinical Attention” (see “Nonsuicidal Self-Injury”). Diagnostic Features The essential feature of nonsuicidal self-injury disorder is that the individual repeatedly inflicts minor-to-moderate, often painful injuries to the surface of his or her body without suicidal intent. Most commonly, the purpose is to reduce negative emotions, such as tension, anxiety, sadness, or self-reproach, or less often to resolve an interpersonal difficulty. In some cases, the injury is conceived of as a deserved self-punishment. The individual will often report an immediate sensation of relief that occurs during the process. When the behavior occurs frequently, it might be associated with a sense of urgency and craving, the resultant behavioral pattern resembling an addiction. The inflicted wounds can become deeper and more numerous. Cutting is the most common method of injury and is most often inflicted with a knife, needle, razor, or other sharp object. Common areas for injury include the dorsal side of the forearm and frontal area of the thighs. A single session of injury might involve a series of superficial, parallel cuts—separated by 1 or 2 centimeters—on a visible or accessible location. The resulting cuts will often bleed and will often leave a characteristic pattern of scars. Other relatively common methods used include superficial scratching or burning of the skin, as well as self-hitting or banging, biting, and interfering with wound healing. Many will use different methods over time, and use of multiple methods is associated with more severe

psychopathology, including engagement in suicide attempts. Many, and possibly most, of those who engage in nonsuicidal self-injury do not seek clinical attention. This tendency may reflect a reluctance to disclose self-injury due to concerns over stigma. In addition, many individuals who engage in these behaviors experience them positively because of the effectiveness of nonsuicidal self-injury in regulating negative emotion, thereby reducing or eliminating motivation for treatment. Children and adolescents might experiment with these behaviors but not experience relief. In such cases, youths often report that the procedure is painful or distressing and might then discontinue the practice. Associated Features Nonsuicidal self-injury disorder appears predominantly maintained by negative reinforcement, in that the behavior is reported to quickly

reduce negative emotion and aversive emotional arousal. Some who engage in the behavior also report that nonsuicidal self-injury can quickly reduce unwanted dissociative experiences and even suicidal ideation, as well as serve as a way to cope with trauma-related symptoms such as self-directed anger and/or disgust. However, other forms of social and emotional reinforcement can also sustain the behavior, such as a desire to elicit reactions from others or generate positive feelings. Prevalence In an international meta-analysis, prevalence of nonsuicidal self-injury disorder was found overall to be modestly higher in girls/women than in boys/men. This is in contrast to suicidal behavior, in which the gender ratio of girls/women to boys/men is much higher. The gender difference for nonsuicidal self-injury disorder is more pronounced in clinical samples. Across cultural contexts, the gender ratio of nonsuicidal self-injury may vary, being more prevalent among girls/women in some contexts (e.g., among high school students in rural areas of China) and among boys/men in others (e.g., among youth ages 11–19 in Jordan). Nonsuicidal self-injury disorder is substantially more common among sexual minorities, especially those who identify as bisexual. Development and Course Nonsuicidal self-injury disorder most often starts in the early to mid-teen years and can continue for many years, with earlier ages at onset being associated with more severe manifestations. Nonsuicidal self-injury disorder may peak in late adolescence and the early 20s and then decline into adulthood. Additional prospective research is needed to outline the natural history of nonsuicidal self-injury disorder and the factors that promote or inhibit its course. Individuals often learn of the behavior on the recommendation or observation of another, through media outlets, and through social media. Individuals exposed to others who self-injure, including in inpatient, school, correctional, and community settings, are more likely to initiate self-injury, potentially through social modeling or social learning mechanisms. Culture-Related Diagnostic Issues

Borderline personality disorder. Suicidal behavior. Trichotillomania (hair-pulling disorder). Nonsuicidal self-injury disorder should not be diagnosed if the behavior is motivated by a widely accepted cultural practice. This is true even if the practice is only carried out by a minority of the population (e.g., engaging in self-flagellation as a collective activity during religious festivals). Nonsuicidal self-injury may be a way of expressing group belongingness rather than individual distress or emotion regulation, as suggested by research with “alternative” (i.e., Goth, Emo, and Punk) youth groups in Germany, and nonsuicidal self-injury disorder should also not be diagnosed in such instances. Association With Suicidal Thoughts or Behavior Because individuals with nonsuicidal self-injury can and do attempt suicide, it is important to evaluate these individuals for suicide risk and to obtain information from a third party concerning any recent change in stress exposure and mood. Likelihood of a suicide attempt has been associated with a history of nonsuicidal self-injury, with the onset of nonsuicidal self-injury typically preceding suicide attempts by approximately 1–2 years, as shown by research in clinical and community settings in three high-income countries. The use of multiple previous methods of nonsuicidal self-injury, high frequencies of self-injurious acts, younger age at onset, and using nonsuicidal self-injury to obtain relief from internal distress or for self-punishment are strongly predictive of both suicidal ideation and suicide attempts. Functional Consequences of Nonsuicidal Self-Injury Disorder The act of cutting might be performed with shared implements, raising the possibility of bloodborne disease transmission. Severe burns, infection from poor care of injuries, and permanent scarring can also result, negatively impacting the individual. Differential Diagnosis Many have regarded nonsuicidal self-injury as pathognomonic of borderline personality disorder. However, although nonsuicidal self-injury disorder is often comorbid with borderline personality disorder, many individuals with

nonsuicidal self-injury disorder do not have a personality pattern that meets criteria for borderline personality disorder. Nonsuicidal self-injury disorder not only occurs without borderline personality disorder but frequently co-occurs with many other disorders, including depressive disorders, eating disorders, and substance disorders. The differentiation between nonsuicidal self-injury disorder and suicidal behavior is based on the stated goal of the behavior, either as a wish to die (suicidal behavior) or to experience relief (as described in the criteria for nonsuicidal self-injury disorder). In contrast to suicidal behavior, nonsuicidal self-injury episodes are, in the short-term, typically benign in individuals with a history of frequent episodes. Further, some individuals report using their nonsuicidal self-injury to avoid attempting suicide. Trichotillomania is defined by self-injurious behavior confined to pulling out one’s own hair, most commonly from the scalp, eyebrows, or eyelashes. The behavior occurs in “sessions” that can last for hours. It is most likely to occur during a

Stereotypic movement disorder. Excoriation (skin-picking) disorder. period of relaxation or distraction. If the self-injurious behavior is confined to hair-pulling, trichotillomania should be diagnosed instead of nonsuicidal self-injury disorder. Stereotypic movement disorder involves repetitive, seemingly driven, and apparently purposeless motor behavior (e.g., hand shaking or waving, body rocking, head banging, self-biting, hitting own body) that can sometimes result in self-injury and is often associated with a known medical or genetic condition, neurodevelopmental disorder, or environmental factor (e.g., Lesch-Nyhan syndrome, intellectual developmental disorder, intrauterine alcohol exposure). If the self-injurious behavior meets criteria for stereotypic movement disorder, it should be diagnosed instead of nonsuicidal self-injury disorder. Excoriation disorder is usually directed to picking at an area of the skin that the individual feels is unsightly or a blemish, usually on the face or the scalp. If the self-injurious behavior is confined to skin-picking, excoriation disorder should be diagnosed instead of nonsuicidal self-injury disorder.

Revision #1
Created 2026-01-04 19:28:42 UTC by Omar Ayman
Updated 2026-01-04 19:28:42 UTC by Omar Ayman