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 OCD.

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:
   1. Impairment in mood or behavioral regulation (e.g., mood lability; negative affect or irritability; frequent behavioral outbursts).
   2. Attention deficit (e.g., difficulty shifting attention; difficulty sustaining mental effort).
   3. 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):
   1. Communication deficit (e.g., delayed acquisition of language; difficulty understanding spoken language).
   2. Impairment in social communication and interaction (e.g., overly friendly with strangers; difficulty reading social cues; difficulty understanding social consequences).
   3. Impairment in daily living skills (e.g., delayed toileting, feeding, or bathing; difficulty managing daily schedule).
   4. 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. The current diagnostic guidelines allow ND-PAE to 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. 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 (e.g., more than light drinking) prior to pregnancy recognition and/or following pregnancy recognition may be required. Light drinking is defined as 1–13 drinks per month during pregnancy with no more than 2 of these drinks consumed on any 1 drinking 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 Supporting Diagnosis

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

The prevalence rates of ND-PAE are unknown. However, estimated prevalence rates of clinical conditions associated with prenatal alcohol exposure are 2%–5% in 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 preschool- or 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.

Suicide Risk

Suicide is a high-risk outcome, with rates increasing significantly in late adolescence and early adulthood.

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. 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

Disorders that are attributable to the physiological effects associated with postnatal use of a substance, another medical condition, or environmental neglect. Other considerations include 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]); or environmental neglect.

Genetic and teratogenic conditions. 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 attention-deficit/hyperactivity disorder, but research has shown that individuals with ND-PAE differ in neuropsychological characteristics and in their responsiveness to phar-

macological 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.

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. Individuals remain at higher risk for further suicide attempts and death in the 24 months after a suicide attempt, and the period 12–24 months after the behavior took place is specified as "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.