# Social Anxiety Disorder

## Diagnostic Criteria (F40.10)

A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation, meeting unfamiliar people), being observed (e.g., eating or drinking), and performing in front of others (e.g., giving a speech).

**Note:** In children, the anxiety must occur in peer settings and not just during interactions with adults.

B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing; will lead to rejection or offend others).

C. The social situations almost always provoke fear or anxiety.

**Note:** In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.

D. The social situations are avoided or endured with intense fear or anxiety.

E. The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context.

F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.

G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H. The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.

J. If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.

*Specify* if:

**Performance only:** If the fear is restricted to speaking or performing in public.

## Specifiers

Individuals with the performance only type of social anxiety disorder have performance fears that are typically most impairing in their professional lives (e.g., musicians, dancers, performers, athletes) or in roles that require regular public speaking. Performance fears may also manifest in work, school, or academic settings in which regular public presentations are required. Individuals with performance only social anxiety disorder do not fear or avoid nonperformance social situations.

## Diagnostic Features

The essential feature of social anxiety disorder is a marked, or intense, fear or anxiety of social situations in which the individual may be scrutinized by others. In children the fear or anxiety must occur in peer settings and not just during interactions with adults (Criterion A). When exposed to such social situations, the individual fears that he or she will be negatively evaluated. The individual is concerned that he or she will be judged as anxious, weak, crazy, stupid, boring, intimidating, dirty, or unlikable. The individual fears that he or she will act or appear in a certain way or show anxiety symptoms, such as blushing, trembling, sweating, stumbling over one's words, or staring, that will be negatively evaluated by others (Criterion B). Some individuals fear offending others or being rejected as a result. Fear of offending others—for example, by a gaze or by showing anxiety symptoms—may be the predominant fear in individuals from cultures with strong collectivistic orientations. An individual with fear of trembling of the hands may avoid drinking, eating, writing, or pointing in public; an individual with fear of sweating may avoid shaking hands or eating spicy foods; and an individual with fear of blushing may avoid public performance, bright lights, or discussion about intimate topics. Some individuals fear and avoid urinating in public restrooms when other individuals are present (i.e., paruresis, or "shy bladder syndrome").

The social situations almost always provoke fear or anxiety (Criterion C). Thus, an individual who becomes anxious only occasionally in the social situation(s) would not be diagnosed with social anxiety disorder. However, the degree and type of fear and anxiety may vary (e.g., anticipatory anxiety, a panic attack) across different occasions. The anticipatory anxiety may occur sometimes far in advance of upcoming situations (e.g., worrying every day for weeks before attending a social event, repeating a speech for days in advance). In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, or shrinking in social situations. The individual will often avoid the feared social situations. Alternatively, the situations are endured with intense fear or anxiety (Criterion D). Avoidance can be extensive (e.g., not going to parties, refusing school) or subtle (e.g., overpreparing the text of a speech, diverting attention to others, limiting eye contact).

The fear or anxiety is judged to be out of proportion to the actual risk of being negatively evaluated or to the consequences of such negative evaluation (Criterion E). Sometimes, the anxiety may not be judged to be excessive, because it is related to an actual danger (e.g., being bullied or tormented by others). However, individuals with social anxiety disorder often overestimate the negative consequences of social situations, and thus the judgment of being out of proportion is made by the clinician. The individual's sociocultural context needs to be taken into account when this judgment is being made. For example, in certain cultures, behavior that might otherwise appear socially anxious may be considered appropriate in social situations (e.g., might be seen as a sign of respect).

The duration of the disturbance is typically at least 6 months (Criterion F). This duration threshold helps distinguish the disorder from transient social fears that are common,

particularly among children and in the community. The fear, anxiety, and avoidance must interfere significantly with the individual's normal routine, occupational or academic functioning, or social activities or relationships, or must cause clinically significant distress (Criterion G). For example, an individual who is afraid to speak in public would not receive a diagnosis of social anxiety disorder if this activity is not routinely encountered on the job or in classroom work, and if the individual is not significantly distressed about it. However, if the individual avoids, or is passed over for, the job or education he or she really wants because of social anxiety symptoms, Criterion G is met.

## Associated Features

Individuals with social anxiety disorder may be inadequately assertive or excessively submissive or, less commonly, highly controlling of the conversation. They may show overly rigid body posture or inadequate eye contact, or speak with an overly soft voice. These individuals may be shy or withdrawn, and they may be less open in conversations and disclose little about themselves. They may seek employment in jobs that do not require social contact, although this is not the case for individuals with social anxiety disorder, performance only. They may live at home longer. Men may be delayed in marrying and having a family, whereas women who would want to work outside the home may live a life without ever doing so (Caspi et al. 1988). Self-medication with substances is common (e.g., drinking before going to a party). Social anxiety among older adults may also include exacerbation of symptoms of medical illnesses, such as increased tremor or tachycardia. Blushing is a hallmark physical response of social anxiety disorder (Bögels et al. 2010).

## Prevalence

The 12-month prevalence estimate of social anxiety disorder for the United States is approximately 7% (Kessler et al. 2005; Kessler et al. 2012; Ruscio et al. 2008). Lower 12-month prevalence estimates are seen in much of the world using the same diagnostic instrument, clustering around 0.5%–2.0%; median prevalence in Europe is 2.3% (Lewis-Fernández et al. 2010; Nagata et al. 2015; Wittchen and Jacobi 2005). Prevalence appears to be increasing in the United States (Heimberg et al. 2000) and East Asian countries (Nagata et al. 2015). Twelve-month prevalence rates in young adolescents (ages 13–17 years) are roughly half those in adults (Kessler et al. 2005; Wittchen et al. 1999). Twelve-month prevalence rates decrease after age 65 (Gum et al. 2009; Trollor et al. 2007). The 12-month prevalence for older adults in North America, Europe, and Australia ranges from 2% to 5% (Kessler et al. 2012; Volkert et al. 2013; Wolitzky-Taylor et al. 2010). In general, higher rates of social anxiety disorder are found in women than in men in the general population (with odds ratios ranging from 1.5 to 2.2) (Fehm et al. 2005), and the gender difference in prevalence is more pronounced in adolescents and young adults (Wittchen et al. 1999). Gender rates are equivalent or slightly higher for men in clinical samples, and it is assumed that gender roles and social expectations play a significant role in explaining the heightened help-seeking behavior in men. Prevalence in the United States has been found to be lower in individuals of Asian, Latinx, African American, and Caribbean Black descent compared with non-Hispanic Whites (Hofmann et al. 2010; Levine et al. 2015; Lewis-Fernández et al. 2010).

## Development and Course

Median age at onset of social anxiety disorder in the United States is 13 years, and 75% of individuals have an age at onset between 8 and 15 years (Kessler et al. 2005). The disorder sometimes emerges out of a childhood history of social inhibition or shyness in U.S. and

European studies (Essex et al. 2010). Onset can also occur in early childhood. Onset of social anxiety disorder may follow a stressful or humiliating experience (e.g., being bullied, vomiting during a public speech) (Rapee and Spence 2004), or it may be insidious, developing slowly. First onset in adulthood is relatively rare (Grant et al. 2005) and is more likely to occur after a stressful or humiliating event or after life changes that require new social roles (e.g., marrying someone from a different social class, receiving a job promotion). Social anxiety disorder may diminish after an individual with fear of dating marries and may reemerge after divorce. Among individuals presenting to clinical care, the disorder tends to be particularly persistent.

Adolescents endorse a broader pattern of fear and avoidance, including of dating, compared with younger children (Rao et al. 2007). Older adults express social anxiety at lower levels but across a broader range of situations, whereas younger adults express higher levels of social anxiety for specific situations (Gretarsdottir et al. 2004). In older adults, social anxiety may concern disability due to declining sensory functioning (hearing, vision) or embarrassment about one's appearance (e.g., tremor as a symptom of Parkinson's disease) or functioning due to medical conditions, incontinence, or cognitive impairment (e.g., forgetting people's names). Detection of social anxiety disorder in older adults may be challenging because of several factors, including a focus on somatic symptoms, comorbid medical illness, limited insight, changes to social environment or roles that may obscure impairment in social functioning, or reticence about describing psychological distress (Mohlman et al. 2012). There is large variation in rates of remission for social anxiety disorder, suggestive of different trajectories (short, fluctuating, and chronic) (Vriends et al. 2014).

## Risk and Prognostic Factors

### Temperamental

Underlying traits that predispose individuals to social anxiety disorder include behavioral inhibition and fear of negative evaluation (Spence and Rapee 2016), as well as harm avoidance (Kampman et al. 2014; Kampman et al. 2017). Personality traits consistently associated with social anxiety disorder are high negative affectivity (neuroticism) and low extraversion (Kampman et al. 2014; Kampman et al. 2017).

### Environmental

There is evidence that negative social experiences, particularly peer victimization, are associated with the development of social anxiety disorder, although causal pathways remain unknown (Blöte et al. 2015). Childhood maltreatment and adversity are risk factors for social anxiety disorder (Tiet et al. 2001). Among African Americans and Caribbean Blacks in the United States, everyday forms of ethnic discrimination and racism are associated with social anxiety disorder (Levine et al. 2014).

### Genetic and physiological

Traits predisposing individuals to social anxiety disorder, such as behavioral inhibition, are strongly genetically influenced (Planalp and Goldsmith 2020). The genetic influence is subject to gene-environment interaction; that is, children with high behavioral inhibition are more susceptible to environmental influences, such as socially anxious modeling by parents (Aktar et al. 2012). Also, social anxiety disorder is heritable (Bögels and Stein 2009). First-degree relatives have a two to six times greater chance of having social anxiety disorder, and liability to the disorder involves the interplay of disorder-specific

(e.g., fear of negative evaluation) and nonspecific (e.g., negative affectivity [neuroticism]) genetic factors. Genetic contribution to social anxiety disorder has been found to be higher for social anxiety disorder in children than social anxiety disorder in adults and higher for social anxiety symptoms than a clinical diagnosis of social anxiety disorder (Scaini et al. 2014).

## Culture-Related Diagnostic Issues

The nature and types of social situations that precipitate symptoms of social anxiety disorder are similar across U.S. ethnoracial groups, including fear of performance/public speaking, social interaction, and being observed (Asnaani et al. 2015; Polo et al. 2011). U.S. non-Latinx Whites report an earlier age at onset of social anxiety disorder than U.S. Latinx, yet the latter describe greater impairment across home, work, and relationship domains associated with the disorder (Polo et al. 2011). Immigrant status is associated with lower rates of social anxiety disorder in both Latinx and non-Latinx White groups (Lewis-Fernández et al. 2010). The syndrome of *taijin kyofusho* (e.g., in Japan and Korea) is often characterized by social-evaluative concerns, fulfilling criteria for social anxiety disorder, which are associated with the fear that the individual makes *other* people uncomfortable (e.g., "My gaze upsets people so they look away and avoid me"), a fear that is at times experienced with delusional intensity. Other presentations of *taijin kyofusho* may fulfill criteria for body dysmorphic disorder or delusional disorder (Hofmann et al. 2010; Kinoshita et al. 2008; Lewis-Fernández et al. 2010; Nagata et al. 2015).

## Sex- and Gender-Related Diagnostic Issues

Age at onset of social anxiety disorder does not differ by gender (McLean et al. 2011; Yonkers et al. 2001). Women with social anxiety disorder report a greater number of social fears and comorbid major depressive disorder and other anxiety disorders, whereas men are more likely to fear dating; have oppositional defiant disorder, conduct disorder, or antisocial personality disorder; and use alcohol and illicit drugs to relieve symptoms of the disorder (McLean et al. 2011; Ruscio et al. 2008; Turk et al. 1998; Xu et al. 2012). Paruresis is more common in men (Kuoch et al. 2017).

## Association With Suicidal Thoughts or Behavior

Among U.S. adolescents, social anxiety disorder has been reported to increase the risk for active suicidal thoughts and suicide attempts in Latinx but not in non-Latinx Whites, independently of the effect of major depression and family income (Rapp et al. 2017).

## Functional Consequences of Social Anxiety Disorder

Social anxiety disorder is associated with elevated rates of school dropout and with decreased well-being, employment, workplace productivity, socioeconomic status, and quality of life (Patel et al. 2002). Social anxiety disorder is also associated with being single, unmarried, or divorced and with not having children (Fehm et al. 2005), particularly among men, whereas women are more likely to be unemployed (MacKenzie and Fowler 2013). Social anxiety disorder is also negatively associated with friendship quality, such that individuals with social anxiety disorder report having friendships that are less close and less supportive than persons without the disorder (Rodebaugh et al. 2012). In older adults, there may be impairment in caregiving duties and volunteer activities. Social anxiety disorder also impedes leisure activities. Despite the extent of distress and social impairment associated with social anxiety disorder, only about half of

individuals with the disorder in high-income societies ever seek treatment, and they tend to do so only after 15–20 years of experiencing symptoms. Not being employed is a strong predictor for the persistence of social anxiety disorder.

## Differential Diagnosis

### Normative shyness

Shyness (i.e., social reticence) is a common personality trait and is not by itself pathological. In some societies, shyness is even evaluated positively. However, when there is a significant adverse impact on social, occupational, and other important areas of functioning, a diagnosis of social anxiety disorder should be considered, and when full diagnostic criteria for social anxiety disorder are met, the disorder should be diagnosed. Only a minority (12%) of self-identified shy individuals in the United States have symptoms that meet diagnostic criteria for social anxiety disorder (Burstein et al. 2011).

### Agoraphobia

Individuals with agoraphobia may fear and avoid social situations (e.g., going to a movie) because escape might be difficult or help might not be available in the event of incapacitation or panic-like symptoms, whereas individuals with social anxiety disorder are most fearful of scrutiny by others. Moreover, individuals with social anxiety disorder are likely to be calm when left entirely alone, which is often not the case in agoraphobia.

### Panic disorder

Individuals with social anxiety disorder may have panic attacks, but the panic attacks are always cued by social situations and do not occur “out of the blue.” Additionally, individuals with social anxiety disorder are more likely to be distressed by fear of negative evaluation stemming from a panic attack than by the panic attacks themselves.

### Generalized anxiety disorder

Social worries are common in generalized anxiety disorder, but the focus is more on the nature of ongoing relationships rather than on fear of negative evaluation. Individuals with generalized anxiety disorder, particularly children, may have excessive worries about the quality of their social performance, but these worries also pertain to nonsocial performance and when the individual is not being evaluated by others. In social anxiety disorder, the worries focus on social performance and others’ evaluation.

### Separation anxiety disorder

Individuals with separation anxiety disorder may avoid social settings (including school refusal) because of concerns about being separated from attachment figures or, in children, about requiring the presence of a parent when it is not developmentally appropriate. Individuals with separation anxiety disorder are usually comfortable in social settings when their attachment figure is present or when they are at home, whereas those with social anxiety disorder may be uncomfortable when social situations occur at home or in the presence of attachment figures.

### Specific phobias

Individuals with specific phobias may fear embarrassment or humiliation (e.g., embarrassment about fainting when they have their blood drawn), but they do not generally fear negative evaluation in other social situations.

### Selective mutism

Individuals with selective mutism may fail to speak because of fear of negative evaluation, but they do not fear negative evaluation in social situations where no speaking is required (e.g., nonverbal play).

### Major depressive disorder

Individuals with major depressive disorder may be concerned about being negatively evaluated by others because they feel they are bad or not worthy of being liked. In contrast, individuals with social anxiety disorder are worried about being negatively evaluated because of certain social behaviors or physical symptoms.

### Body dysmorphic disorder

Individuals with body dysmorphic disorder are preoccupied with one or more perceived defects or flaws in their physical appearance that are not observable or appear slight to others; this preoccupation often causes social anxiety and avoidance. If their social fears and avoidance are caused only by their beliefs about their appearance, a separate diagnosis of social anxiety disorder is not warranted.

### Delusional disorder

Individuals with delusional disorder may have nonbizarre delusions and/or hallucinations related to the delusional theme that focus on being rejected by or offending others. Although extent of insight into beliefs about social situations may vary, many individuals with social anxiety disorder have good insight that their beliefs are out of proportion to the actual threat posed by the social situation.

### Autism spectrum disorder

Social anxiety and social communication deficits are hallmarks of autism spectrum disorder. Individuals with social anxiety disorder typically have adequate age-appropriate social relationships and social communication capacity, although they may appear to have impairment in these areas when first interacting with unfamiliar peers or adults.

### Personality disorders

Given its frequent onset in childhood and its persistence into and through adulthood, social anxiety disorder may resemble a personality disorder. The most apparent overlap is with avoidant personality disorder. Individuals with avoidant personality disorder have a broader avoidance pattern and higher rates of impairment than those individuals with social anxiety disorder (Weinbrecht et al. 2016). Moreover, individuals with avoidant personality disorder have a strong and pervasively negative self-concept, a view of rejection as equating to a global evaluation of the self as being of little worth, and a sense of not fitting in socially that dates from early childhood (Lampe 2015). Nonetheless, social anxiety disorder is typically more comorbid with avoidant personality disorder than with any other personality disorder, and avoidant personality disorder is more comorbid with social anxiety disorder than with any other anxiety disorder.

### Other mental disorders

Social fears and discomfort can occur as part of schizophrenia, but other evidence for psychotic symptoms is usually present. In individuals with an eating disorder, it is important to determine that fear of negative evaluation about eating disorder symptoms or behaviors (e.g., purging and vomiting) is not the sole source of social anxiety before applying a diagnosis of social anxiety disorder. Similarly, obsessive-compulsive disorder may be associated with social anxiety, but the additional diagnosis of social anxiety disorder is used only when social fears and avoidance are independent of the foci of the obsessions and compulsions.

### Other medical conditions

Medical conditions may produce symptoms that may be embarrassing (e.g., trembling in Parkinson's disease). When the fear of negative evaluation due to other medical conditions is judged to be excessive, a diagnosis of social anxiety disorder should be considered.

### Oppositional defiant disorder

Refusal to speak because of opposition to authority figures should be differentiated from failure to speak because of fear of negative evaluation.

## Comorbidity

Social anxiety disorder is often comorbid with other anxiety disorders, major depressive disorder, and substance use disorders, and the onset of social anxiety disorder generally precedes that of the other disorders, except for specific phobia and separation anxiety disorder (Beesdo et al. 2007). Chronic social isolation in the course of social anxiety disorder may result in major depressive disorder. Comorbidity with depression is high also in older adults (King-Kallimanis et al. 2009). Substances may be used as self-medication for social fears, but the symptoms of substance intoxication or withdrawal, such as trembling, may also be a source of (further) social fear. Social anxiety disorder is frequently comorbid with body dysmorphic disorder, and generalized social anxiety disorder is often comorbid with avoidant personality disorder (Friborg et al. 2013). In children, comorbidities with high-functioning autism spectrum disorder (van Steensel et al. 2011) and selective mutism are common.

## References: Social Anxiety Disorder

Aktar E, Majdandžic M, de Vente W, Bögels SM: The interplay between expressed parental anxiety and infant behavioural inhibition predicts infant avoidance in a social referencing paradigm. J Child Psychol Psychiatry August 27, 2012 10.1111/j.1469-7610.2012.02601.x

Asnaani A, Aderka IM, Marques L, et al: The structure of feared social situations among race-ethnic minorities and Whites with social anxiety disorder in the United States. Transcult Psychiatry 52(6):791–807, 2015

Beesdo K, Bittner A, Pine DS, et al: Incidence of social anxiety disorder and the consistent risk for secondary depression in the first three decades of life. Arch Gen Psychiatry 64(8):903–912, 2007

Blöte AW, Miers C, Heyne DA, Westenberg PM: Social anxiety and the school environment of adolescents, in Social Anxiety and Phobia in Adolescents. Edited by Ranta K, La Greca AM, Garcia Lopez L-J, Marttunen M. Cham, Switzerland, Springer, 2015, pp 151–181

Bögels SM, Stein M: Social phobia, in Stress-Induced Fear Circuitry Disorders: Advancing the Research Agenda for DSM-5. Edited by Andrews G, Charney DS, Sirovatka PJ, Regier DA. Arlington, VA, American Psychiatric Publishing, 2009, pp 59–75

Bögels SM, Alden L, Beidel DC, et al: Social anxiety disorder: questions and answers for the DSM-V. Depress Anxiety 27(2):168–189, 2010

Burstein M, Ameli-Grillon L, Merikangas KR: Shyness versus social phobia in US youth. Pediatrics 128(5):917–925, 2011

Caspi A, Elder GH, Bem DJ: Moving away from the world: life-course patterns of shy children. Devel Psychol 24:824–831, 1988

Essex MJ, Klein MH, Slattery MJ, et al: Early risk factors and developmental pathways to chronic high inhibition and social anxiety disorder in adolescence. Am J Psychiatry 167(1):40–46, 2010 10.1176/appi.ajp.2009.07010051

Fehm L, Pelissolo A, Furmark T, Wittchen HU: Size and burden of social phobia in Europe. Eur Neuropsychopharmacol 15(4):453–462, 2005

Friborg O, Martinussen M, Kaiser S, et al: Comorbidity of personality disorders in anxiety disorders: a meta-analysis of 30 years of research. J Affect Disord 145(2):143–155, 2013

Grant BF, Hasin DS, Blanco C, et al: The epidemiology of social anxiety disorder in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. J Clin Psychiatry 66(11):1351–1361, 2005

Gretarsdottir E, Woodruff-Borden J, Meeks S, Depp CA: Social anxiety in older adults: phenomenology, prevalence, and measurement. Behav Res Ther 42(4):459–475, 2004

Gum AM, King-Kallimanis B, Kohn R: Prevalence of mood, anxiety, and substance-abuse disorders for older Americans in the National Comorbidity Survey Replication. Am J Geriatr Psychiatry 17:769–781, 2009

Heimberg RG, Stein MB, Hiripi E, Kessler RC: Trends in the prevalence of social phobia in the United States: a synthetic cohort analysis of changes over four decades. Eur Psychiatry 15(1):29–37, 2000

Hofmann SG, Asnaani MAA, Hinton DE: Cultural aspects in social anxiety and social anxiety disorder. Depress Anxiety 27(12):1117–1127, 2010

Kampman O, Viikki M, Järventausta K, Leinonen E: Meta-analysis of anxiety disorders

and temperament. Neuropsychobiology 69(3):175–186, 2014

Kampman O, Viikki M, Leinonen E: Anxiety disorders and temperament—an update review. Curr Psychiatry Rep 19(5):27, 2017

Kessler RC, Chiu WT, Demler O, et al: Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry 62(6):617–627, 2005

Kessler R, Petukhova M, Samson NA, et al: Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States.. Int J Methods Psychiatr Res 21(3):169–184, 2012

King-Kallimanis BL, Gum AM, Kohn R: Comorbidity of depressive and anxiety disorders for older Americans in the national comorbidity survey-replication. Am J Geriatr Psychiatry 17(9):782–792, 2009

Kinoshita Y, Chen J, Rapee RM: Cross-cultural study of conviction subtype Taijin Kyofu: proposal and reliability of Nagoya-Osaka diagnostic criteria for social anxiety disorder. J Nerv Ment Dis 196(4):307–313, 2008

Kuoch KLJ, Meyer D, Austin DW, Knowles SR: A systematic review of pareresis: clinical implications and future directions. J Psychosom Res 98:122–129, 2017

Lampe L: Social anxiety disorders in clinical practice: differentiating social phobia from avoidant personality disorder. Australas Psychiatry 23(4):343–346, 2015

Levine DS, Himle JA, Abelson JM, et al: Discrimination and social anxiety disorder among African-Americans, Caribbean blacks, and non-Hispanic whites. J Nerv Ment Dis 202(3):224–230, 2014

Levine DS, Taylor RJ, Nguyen AW, et al: Family and friendship informal support networks and social anxiety disorder among African Americans and Black Caribbeans. Soc Psychiatry Psychiatr Epidemiol 50(7):1121–1133, 2015

Lewis-Fernández R, Hinton DE, Laria AJ, et al: Culture and the anxiety disorders: recommendations for DSM-V. Depress Anxiety 27(2):212–229, 2010

MacKenzie MB, Fowler KF: Social anxiety disorder in the Canadian population: exploring gender differences in sociodemographic profile. J Anxiety Disord 27(4):427–434, 2013

McLean CP, Asnaani A, Litz BT, Hofmann SG: Gender differences in anxiety disorders: prevalence, course of illness, comorbidity and burden of illness. J Psychiatr Res 45(8):1027–1035, 2011

Mohlman J, Bryant C, Lenze EJ, et al: Improving recognition of late life anxiety disorders in Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition: observations and recommendations of the Advisory Committee to the Lifespan Disorders Work Group. Int J Geriatr Psychiatry 27(6):549–556, 2012

Nagata T, Suzuki F, Teo AR: Generalized social anxiety disorder: a still-neglected anxiety disorder 3 decades since Liebowitz's review. Psychiatry Clin Neurosci 69(12):724–740, 2015

Patel A, Knapp M, Henderson J, Baldwin D: The economic consequences of social phobia. J Affect Disord 68(2–3):221–233, 2002

Planalp EM, Goldsmith HH: Observed profiles of infant temperament: stability, heritability, and associations with parenting. Child Dev 91(3):e563–e580, 2020

Polo AJ, Alegría M, Chen C-N, Blanco C: The prevalence, comorbidity, and age of onset of social anxiety disorder among US Latinos. J Clin Psychiatry 72(8):1096–1105, 2011

Rao PA, Beidel DC, Turner SM, et al: Social anxiety disorder in childhood and adolescence: descriptive psychopathology. Behav Res Ther 45(6):1181–1191, 2007

Rapee RM, Spence SH: The etiology of social phobia: empirical evidence and an initial model. Clin Psychol Rev 24(7):737–757, 2004

Rapp AM, Lau A, Chavira DA: Differential associations between Social Anxiety Disorder, family cohesion, and suicidality across racial/ethnic groups: findings from the National Comorbidity Survey—Adolescent (NCS-A). J Anxiety Disord 48:13–21, 2017

Rodebaugh TL, Fernandez KC, Levinson CA: Testing the effects of social anxiety disorder on friendship quality across gender and ethnicity. Cogn Behav Ther 41(2):130–139, 2012

Ruscio AM, Brown TA, Chiu WT, et al: Social fears and social phobia in the USA: results from the National Comorbidity Survey Replication. Psychol Med 38(1):15–28, 2008

Scaini S, Belotti R, Ogliari A: Genetic and environmental contributions to social anxiety across different ages: a meta-analytic approach to twin data. J Anxiety Disord 28(7):650–656, 2014

Spence SH, Rapee RM: The etiology of social anxiety disorder: an evidence-based model. Behav Res Ther 86:50–67, 2016

Tiet QQ, Bird HR, Hoven CW, et al: Relationship between specific adverse life events and psychiatric disorders.. J Abnorm Child Psychol 29(2):153–164, 2001

Trollor JN, Anderson TM, Sachdev PS, et al. Prevalence of mental disorders in the elderly: the Australian National Mental Health and Well-being Survey. Am J Geriatr Psychiatry 15:455–466, 2007

Turk CL, Heimberg RG, Orsillo SM, et al: An investigation of gender differences in social phobia. J Anxiety Disord 12(3):209–223, 1998

van Steensel FJ, Bögels SM, Perrin S: Anxiety disorders in children and adolescents with autistic spectrum disorders: a meta-analysis. Clin Child Fam Psychol Rev 14(3):302–317, 2011

Volkert J, Schulz H, Härter M, et al: The prevalence of mental disorders in older people in Western countries: a meta-analysis. Ageing Res Rev 12(1):339–353, 2013

Vriends N, Bolt OC, Kunz SM: Social anxiety disorder, a lifelong disorder? A review of the spontaneous remission and its predictors. Acta Psychiatr Scand 130(2):109–122, 2014

Weinbrecht A, Schulze L, Boettcher J, Renneberg B: Avoidant personality disorder: a current review. Curr Psychiatry Rep 18(3):29, 2016

Wittchen HU, Jacobi F: Size and burden of mental disorders in Europe—a critical review and appraisal of 27 studies. Eur Neuropsychopharmacol 15(4):357–376, 2005

Wittchen HU, Stein MB, Kessler RC: Social fears and social phobia in a community sample of adolescents and young adults: prevalence, risk factors and co-morbidity. Psychol Med 29(2):309–323, 1999

Wolitzky-Taylor KB, Castriotta N, Lenze EJL, et al: Anxiety disorders in older adults: a comprehensive review. Depress Anxiety 27(2):190–211, 2010

Xu Y, Schneier F, Heimberg RG, et al: Gender differences in social anxiety disorder: results from the national epidemiologic sample on alcohol and related conditions. J Anxiety Disord 26(1):12–19, 2012

Yonkers KA, Dyck IR, Keller MB: An eight-year longitudinal comparison of clinical course and characteristics of social phobia among men and women. Psychiatr Serv 52(5):637–664, 2001