Diagnosis and Treatment of Anxiety Disorders

Eileen E. Joy & Cynthia L. Turk

Washburn University

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About the Authors:

Eileen Joy received her master's degree in psychology with a clinical emphasis from Washburn University. She is currently working towards her doctorate in counseling psychology from Purdue University. Her research focuses on anxiety, poverty, and vulnerable populations.

Cynthia L. Turk, PhD, received her doctoral degree in clinical psychology from Oklahoma State University after completing her doctoral internship at the University of Mississippi/Department of Veterans Affairs Medical Centers Psychology Residency Consortium. She completed a postdoctoral fellowship at the Adult Anxiety Clinic at Temple University. She is currently a Professor of Psychology and the Psychology Department Chair at Washburn University. She is also Director of the Anxiety Clinic in Washburn University's Psychological Services Clinic. Dr. Turk regularly presents and publishes in the areas of social anxiety disorder and generalized anxiety disorder.

Diagnosis and Treatment of Anxiety Disorders

Eileen E. Joy & Cynthia L. Turk Ph.D.

Although the words *fear, anxiety,* and *panic* are often used interchangeably in daily life, mental health professionals understand these terms to have different meanings (Barlow, 2002). *Fear* arises from a current, realistically dangerous situation, provokes a strong physical response, and motivates fleeing, fighting or freezing. If your car started to go out of control on an icy highway, you froze, your heart pounded, and you thought "I am going to die," then you were experiencing fear. *Anxiety* focuses on a future possible threat and is typically associated with more subtle bodily reactions and avoidance behaviors than fear. If your muscles were tense and you were having trouble concentrating because you were waiting for the results of some important medical tests with uncertain outcomes and thinking "I might have cancer," you were experiencing anxiety. *Panic***,** or a *panic attack*, is the same as the fear response except the trigger for the fear response is either unknown or it is something that is not truly dangerous. If you had a rush of strong emotion while giving a speech and wanted to run out of the room, it would probably best be described as a panic attack. Although it is true that not doing well on a speech could have some negative consequences in the future, it is not fair to say that a speech poses imminent life-threatening danger.

Fear and anxiety are fundamentally adaptive. Fear mobilizes us to respond quickly to danger. It is a good thing to be afraid of a barking, snarling dog running at you because it mobilizes you to flee to safety. Anxiety helps us to recognize possible future threats and take steps to avoid them. Some anxiety about a job interview makes it more likely that you will take the time to prepare for it and then be on your best behavior during it. Fear and anxiety, however, can become so intense, persistent, or inappropriate that they lead to significant suffering or life

impairment. When that is the case, fear and anxiety can become components of an anxiety disorder. As a group, the anxiety disorders have in common a physically aroused state accompanied by apprehension, uncertainty, and/or lack of a sense of control over outcomes.

Anxiety disorders are the most common mental health diagnosis in the United States, with over 30% of Americans living with one at some point in their lives (Kessler, Petukhova, Sampson, Zaslavsky, & Wittchen, 2012). The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5, American Psychiatric Association [APA], 2013) classifies 11 anxiety disorders which can typically be distinguished by what the individual worries about or fears. A key feature of all the anxiety disorders is that the anxiety is excessive and significantly impacts the quality of life of those diagnosed through either distress or functional impairment.

Differences with the DSM-5

The DSM-5 includes several changes to the anxiety disorders section compared to the fourth edition of the manual. Notably, obsessive-compulsive disorder (OCD) and post-traumatic stress disorder (PTSD) are no longer classified as anxiety disorders and are categorized within their own sections: obsessive-compulsive and related disorders and the trauma and stressor related disorders, respectively (APA, 2013). Separation anxiety disorder and selective mutism are now included within the anxiety disorders – rather than under disorders usually first diagnosed in infancy, childhood or adolescence – due to the conceptualization of these disorders as being rooted in anxiety. Two changes were made across the criteria for agoraphobia, specific phobia, and social anxiety disorder. The DSM-5 specifies that these three disorders include a 6 month time duration criterion regardless of age, and the individual is not required to recognize that their anxiety is excessive or unreasonable. Other changes made to the anxiety disorders in the DSM-5 are described in each disorder's respective section below.

Etiology of Anxiety Disorders

The anxiety disorders and mood disorders are commonly comorbid and likely have a shared etiology (Wilamowska et al., 2010). Most individuals seeking treatment for an anxiety disorder experience an additional anxiety or mood disorder at some point in their lives (76%) and over half of them meet criteria for another anxiety or mood disorder at the time of treatment (55%; Brown, Campbell, Lehman, Grisham, & Mancill, 2001). Cognitive-behavioral treatment for the primary anxiety diagnosis is typically associated with reductions in comorbid anxiety and mood disorder symptoms (Tsao, Mystkowski, Zucker, & Craske, 2002). The overall symptom reduction despite targeted treatment suggests that the mechanism of these disorders is shared. The shared etiology of anxiety and mood disorders is consistent with the triple vulnerability model (Barlow, 2000; Barlow, 2002) which posits that there is a generalized biological (heritable) vulnerability, generalized psychological vulnerability, and specific psychological vulnerability which contribute to the development of emotional disorders.

The generalized biological vulnerability proposes a common genetic basis (polygenic and not limited to a single "anxiety gene") that appears to precede the development of both anxiety and mood disorders (Barlow, 2002). Common neurobiological factors underlying the anxiety and mood disorders may include limited cortical inhibitory control, hyperexcitability of limbic system, and increased amygdale activation (Etkin & Wager, 2007; Shin & Liberzon, 2010). These neurological differences between those who develop anxiety disorders and the general population are associated with greater reactivity to emotional events.

The generalized biological vulnerability is manifested in individuals as stable and heritable traits of temperament (Barlow, 2000). Specifically, neuroticism/ negative affectivity and extraversion/ positive affectivity are influential to the development of anxiety and mood

disorders (Wilamowska et al., 2010). Neuroticism/ negative affectivity is the tendency to respond to stressors with heightened negative emotions and is evident across all of the emotional disorders (Hetteman, Neale, Myers, Prescott, & Kendler, 2006). Extraversion/ positive affectivity is the tendency towards experiencing positive emotions, engaging in high external activity, and enjoyment of social interactions. Low extraversion/ positive affectivity appears specific to the development of major depressive disorder, agoraphobia, and social anxiety disorder, whereas high extraversion/ positive affectivity is specific to the development of mania (Brown, 2007; Gruber, Johnson, Oveis, & Keltner, 2008; Rosellini, Lawrence, Meyer, & Brown, 2010). The genetic contribution of neuroticism and extraversion to the development of emotional disorders is significant, accounting for 30% to 50% of the variance (Bienvenu, Hettema, Neale, Prescott, & Kendler, 2007; Hetteman et al., 2006).

The generalized psychological vulnerability is the second factor associated with the development of an anxiety or mood disorder. Early life experiences may lead individuals to perceive the world as unpredictable and uncontrollable. For example, parents who are warm, predictable, and consistent and who encourage age-appropriate environmental exploration foster a healthy sense of control in their children. In contrast, parents who are inconsistent in meeting their children's needs or who are overcontrolling foster an external locus of control in their children, which is associated with negative affect and clinical symptoms (e.g., Chorpita, Barlow, & Brown, 1998). Moreover, perceptions of uncontrollability and unpredictability are broadly associated with a wide range of emotional disorders (Gould & Edelstein, 2010; Moulding, Kyrios, Doron, & Nedeljkovic, 2009; Stapinski, Abbott, & Rapee, 2010).

The specific psychological vulnerability is the third etiological component which increases the risk of developing a specific anxiety or mood disorder. While the generalized

biological and psychological vulnerabilities contribute to the individuals' emotional, cognitive, and physical reactivity to stressors overall, the specific psychological vulnerability influences the target of the individual's distress and fear (Barlow, 2002). The specific psychological vulnerability is developed through learning that some situation is dangerous, such as social evaluations in social anxiety disorder or physical sensations in panic disorder. This learning may occur by direct experience, through observation, or through cultural transmission.

Which experiences shape the development of a specific psychological vulnerability is clearer for disorders where the phobic response is specific, such as with social anxiety disorder, panic disorder, or specific phobias. A child who was taught that it is bad to have other people think negatively about him or her may be vulnerable to developing social anxiety. A child who was bitten by a dog may be more likely to develop a specific phobia of dogs. A child who had early learning experiences suggesting that certain bodily sensations are dangerous (e.g., loss of a loved one to an illness; parent modeling excessive health concerns) may be more likely to develop panic disorder. The specific psychological vulnerabilities for developing disorders with more generalized distress such as major depressive disorder or GAD are still debated.

Other proposed specific psychological vulnerabilities include thought action fusion for obsessive-compulsive disorder, dysfunctional attitudes for depressive disorders, and intolerance of uncertainty for GAD (Brown & Naragon-Gainey, 2013). Thought action fusion is the belief that one's thoughts can influence the likelihood that a negative event will occur (e.g., thinking about someone dying makes it more likely that they will die) or that having a disturbing thought is as immoral as acting on the thought (e.g., fleeting thought about hurting someone is the moral equivalent of hurting someone). Intolerance of uncertainty has been defined as the tendency to view ambiguous situations as negative or a general discomfort with not knowing (Boelen,

Reijntjes, & Carleton, 2014). While intolerance of uncertainty is associated with the worry typical of GAD, it is unclear if it is specifically predictive of GAD or represents a more generalized vulnerability. Some research suggests that intolerance of uncertainty may also predict depression, obsessive-compulsive disorder, and separation anxiety disorder (Boelen et al., 2014; Gentes & Ruscio, 2011). Although an individual may have insight into the exact experiences which constituted a specific psychological vulnerability, such insight is typically not necessary for effective treatment.

The specific psychological vulnerability is conceptualized as the particular expression of one's anxiety whereas that the generalized biological and psychology vulnerabilities are the underlying factors related to developing an emotional disorder (Wilamowska et al., 2010). Consistent with this conceptualization, transdiagnostic models of treatments are used to target the core features found across the emotional disorders. The triple vulnerability model posits that any one vulnerability is not enough to develop an emotional disorder. Nor does having multiple vulnerabilities guarantee that an individual will develop an emotional disorder. Rather, the three vulnerabilities interact to increase the likelihood that an anxiety or mood disorder may develop over the individual's lifespan. Most typically, the anxiety or mood disorder will emerge in the context of a significant life stressor.

DSM-5 Anxiety Disorders

Panic Disorder

Case presentation

Rita is a 47 year old women who was referred by her physician after months of medical visits and tests failed to explain her episodes of chest pain, rapid heart rate, dizziness, shaking, and shortness of breath. These episodes would begin abruptly, with her symptoms appearing to

come out of nowhere. Rita feared that these episodes (panic attacks) precipitated a heart attack, which led her to seek medical attention. She currently experiences about three of these episodes per week. The first time she experienced these symptoms, she was going to court to finalize her divorce. Rita was frightened by her symptoms and left the court building until the episode passed. She is often worried about having another panic attack and has become increasingly sensitive to changes in her heart rate. To prevent additional panic attacks, Rita avoids "stressful" situations, such as talking to her ex-husband and completing difficult tasks at work, as well as activities that might increase her heart rate, such as walking up stairs.

Characteristics and symptoms

Panic disorder describes individuals who experience multiple unexpected panic attacks and at least one month of persistent worry and impairment in behavior related to the panic attacks (APA, 2013). Panic attacks describe a sudden episode of physiological and cognitive symptoms that culminate within a few minutes. At least four of the following symptoms must occur to be considered a panic attack: increased or pounding heart rate, sweating, shaking, numbness or tingling, shortness of breath, choking sensations, feeling hot or cold, chest pain, nausea, dizziness, derealization or depersonalization, fear of dying, fear of losing control or going crazy. Individuals with panic disorder often worry about the danger of having a panic attack, that they will not be able to control themselves, or that others will judge them for their symptoms. Impairment in behavior includes efforts to avoid or prevent additional panic attacks, such as by avoiding activities that may cause panic symptoms. A required criterion of panic disorder is that at least some of the panic attacks must be unexpected and not associated with known trigger, substance, or medical condition. An individual can be diagnosed with panic disorder if they experience both expected and unexpected panic attacks. Some people may wake

up unexpectedly with a panic attack, which is referred to as a nocturnal panic attack. Nocturnal panic attacks are a common feature of panic disorder, with 18-45% of those with panic disorder reporting nocturnal panic attacks (Papadimitriou & Linkowski, 2005).

Impairment and distress

Individuals with panic disorder often avoid activities in their daily lives that may cause panic symptoms, such as exercising, having caffeine, or taking medications. They tend to have higher rates of unemployment, high use of disability or welfare programs, and miss over twice as many work days as the general population (Bystritsky et al., 2010). Panic disorder is also associated with significant impairment related to seeking out medical evaluations and treatment. Many people with panic disorder initially go to hospital emergency rooms for treatment, and approximately half continue to visit the emergency room for recurrent panic attacks (Bystritsky et al., 2010). Those with panic disorder may incur large medical debts, be misdiagnosed with another medical condition, and may have lost earnings due to frequent hospital visits (Roberge et al., 2005). Panic disorder is also associated with financial dependency, marital difficulties, and poor sense of health (Davidoff et al., 2012).

Differences from DSM-5

Panic disorder and agoraphobia are distinct diagnoses in the DSM-5 and are assigned separately based on symptoms (APA, 2013). People may be diagnosed with only panic disorder, only agoraphobia, or both disorders. Panic attacks also no longer have the strict time criterion that the panic symptoms must reach their peak within 10 minutes of the initial symptom. Instead, the definition is more lenient, stating that symptoms peak within minutes. This change is due to epidemiological studies evidencing that approximately one third of individuals would otherwise meet criteria for a panic attack if the time restriction was more flexible (Craske et al., 2010). The

DSM-5 also describes panic attacks as expected or unexpected, based on their association with a known trigger (APA, 2013).

Prevalence

Less than 4% of people will have panic disorder at some point in their lives, with 2.4% meeting criteria for the diagnosis each year (Kessler et al., 2005; Kessler et al., 2012). Females are twice as likely to develop panic disorder as males (Kessler et al., 2012). Within the United States, non-Latino white and Native American individuals are more likely to experience panic disorder compared to African Americans, Caribbean American black, Asian American, and Latino individuals (Levine et al., 2013; Lewis-Fernández et al., 2010). Globally, panic disorder is most prevalent in the United States and Europe, with majority non-white countries (Nigeria, South Korea, Japan, China, Mexico, and South Africa) reporting 12-month prevalence rates between 0.1% and 0.8% (Lewis-Fernández et al., 2010).

Course of the Disorder

Panic disorder typically emerges between adolescence until early adulthood and is rarely seen in individuals prior to puberty (Copeland et al., 2014). The development of panic disorder can be categorized as early or late onset, with some individuals reporting mean age of onset of 17 years and others reporting a mean age of onset of 39 years (Tibi et al., 2013). While individuals with early onset panic disorder do not appear to be demographically different from those with late onset, comorbid agoraphobia was more common among those with an earlier onset. Although panic attacks are central feature of panic disorder, most individuals who experience panic attacks do not develop the disorder. Panic attacks are not uncommon in the general population, as approximately 15%-28% of individuals experiencing a panic attack at some point in their life (Eaton, Kessler, & Wittchen, 1994; Kessler et al., 2006). In contrast, only 13% of

those who have experienced a panic attack develop panic disorder (Jonge et al., 2016). Thus, the significant worry or avoidance related to panic attacks is the fundamental component for developing the disorder.

Comorbid Disorders

Panic disorder is associated with significant risk for experiencing another mental disorder, as 83% of individuals meet criteria for another mental diagnosis at some point in their lives (Kessler et al., 2006). Similarly, 62% of those in treatment present with a comorbid diagnosis (Brown et al., 2001). A significant percentage of individuals with a primary diagnosis of panic disorder also present with post-traumatic stress disorder (23%); major depressive disorder (23%); or another anxiety disorder (46%; Brown et al., 2001). The most common anxiety disorders that those with panic disorder experience in their lifetimes are agoraphobia (15%), separation anxiety disorder (13%), and GAD (12%; Copeland et al., 2014). Risk of lifetime comorbidity increases significantly when an individual is diagnosed with both panic disorder and agoraphobia (Kessler et al., 2006). Panic disorder is also associated with several medical disorders including cardiovascular disease, chronic pain conditions, and respiratory diseases such as asthma (Goodwin & Pine, 2002; Sareen, Cox, Clara, & Asmundson, 2005). This fact is particularly interesting considering that the fears and help seeking behaviors associated with panic disorder are usually medical in nature. However, the causal relationship between panic disorder and comorbid medical conditions remains unclear (Sareen et al., 2005).

Differential diagnostic issues

To meet criteria for panic disorder, the panic attacks must not be due to the effects of a substance, medication, or medical condition (APA, 2013). Many of the physical symptoms of panic are associated with physiological arousal which is associated with several cardiovascular,

hormonal, and respiratory conditions. Because of this, clients should consider a medical assessment before engaging in treatment for panic disorder (Barlow, 2002). As most individuals with panic disorder initially seek medical treatment for symptoms (Bystritsky et al., 2010), it is likely the possibility that symptoms are medical in origin has already been ruled out by the time clients present for psychological treatment. Individuals who only experience limited symptom panic attacks, with less than four symptoms, would not be diagnosed with panic disorder. If the limited symptoms panic attacks are unexpected and impairing, a diagnosis of other specified anxiety disorder may be appropriate. Panic attacks occurring within the context of another mental or medical diagnosis may be described with the panic attack specifier, not with a panic disorder diagnosis.

Panic Attack Specifier

The DSM-5 introduced the panic attack specifier which can be given to describe individuals who experience expected or unexpected panic attacks in association with any mental or medical disorder, excluding panic disorder (APA, 2013). The criteria for panic attacks in the specifier are identical to those experienced in panic disorder: an abrupt surge of four or more panic symptoms that peak within minutes (APA, 2013). Panic attacks without panic disorder are associated with anxiety disorders, particularly specific phobia and social anxiety; mood disorders; eating disorders; psychotic disorders; and alcohol dependence (Craske et al., 2010). Those with trauma-related disorders may also experience cued panic attacks following reminders of the trauma. Prevalence of panic attacks is not associated with differences in race or ethnicity, however females are more likely to experience panic attacks than males (Eaton et al., 1994; Lewis-Fernández et al., 2010). Both individual who do and do not meet for an existing mental or medical diagnosis may experience panic attacks following stressors. For example, rates of panic

attacks increased among New York City residents in the year following the World Trade Center attacks in 2001 (Adams & Boscarino, 2005). The panic attack specifier would be appropriate if the individual experiences panic attacks within the context of an existing diagnosis. Medical conditions such as hyperthyroidism, cardiopulmonary disorders, and seizures or the effects of substances may be misdiagnosed as panic attacks.

Agoraphobia

Case presentation

David is a 71-year-old male who becomes anxious in multiple situations such as taking the bus, being in open spaces, and being outside of his home alone. He fears that, in these situations, he will fall and not be able to get help. These fears developed two years ago when David's older brother fell at the grocery store and needed surgery due to his injuries. While David can leave his house to visit places in his neighborhood, he often plans to take such trips when his children or friends visit. Otherwise, David spends a significant amount of time planning his trips and keeping an inventory of what he needs to limit the number of trips necessary. Because he only goes on trips outside of the home for necessities like food and medication, he will not leave the house by himself to visit family or friends. David also avoids shopping at large department stores, walking across parking lots, and taking the bus due to fears that, if he falls, he won't be able to get up and no one will help him. When David presented for treatment, he did not have a history of falling and his physician reported that his risk of falling is low.

Characteristics and symptoms

Agoraphobia is characterized by fear or anxiety of being in at least two of the following situations: on public transportation, in open spaces, in enclosed spaces, in crowds or standing in

line, and outside of the home alone (APA, 2013). Those with agoraphobia fear or avoid these situations due to worries that they will not be able to escape or get help if they experience panic-like, embarrassing, or incapacitating symptoms. Embarrassing or incapacitating symptoms may include panic attacks, incontinence, falling, vomiting, or, for children, becoming disoriented and lost. Individuals with agoraphobia engage in avoidance behaviors or endure the feared situations with intense distress. The fear and avoidance must be persistent, typically lasting 6 months, and out of proportion to the actual danger of the situation. Agoraphobia may be diagnosed when the feared symptoms are associated with an existing medical condition (such as inflammatory bowel disease or Parkinson's disease), if the fear is clearly excessive. Agoraphobia may be diagnosed regardless of if the individual also meets for panic disorder.

Impairment and distress

The impairment associated with agoraphobia largely stems from the avoidance and distress experienced when faced with the feared situations. In the feared situations, some individuals with agoraphobia may distract themselves, ask others to accompany them, or engage in other avoidance behaviors to lessen their distress. The severity of the agoraphobic fear and avoidance is predictive of the level of impairment experienced, as some individuals will restrict themselves to only traveling in their neighborhood while others are completely homebound (Barlow, 2014). Agoraphobia is associated with impairment in work productivity, greater number of disability days, and higher rates of reported overall disability (Wittchen Gloster, Beedso-Baum, Fava, & Craske, 2010). Individuals with agoraphobia report higher rates of work and leisure impairment when they also have a comorbid diagnosis of panic disorder compared to those who do not (Wittchen et al., 2008).

Differences from DSM-5

In the DSM-5, agoraphobia is a separate diagnosis from panic disorder (APA, 2013). This distinction is due to epidemiological reports that 46-85% of individuals otherwise meeting criteria for agoraphobia do not experience panic attacks (Wittchen et al., 2010). The diagnosis additionally requires that the individual endorses fear of at least two of five separate agoraphobic situations (APA, 2013), as this was found to help distinguish agoraphobia from specific phobia (Wittchen et al., 2010). Consistent with the changes across the anxiety disorders, the individual does not have to have insight that the fears are excessive, and symptoms should be persistent, lasting approximately 6 months or more. The time criterion of 6 months for agoraphobia is flexible and should be used as a guide to differentiate agoraphobia from more transient fears (APA, 2013).

Prevalence

In the United States, approximately 2.5% of people will meet for agoraphobia at one point in their life, with 1.7% meeting criteria each year (Kessler et al., 2012). There are not any significant ethnic or racial differences in the prevalence of agoraphobia (Lewis-Fernández et al., 2010). The disorder is more common in females than males (Kessler et al., 2012). Many individuals who meet for agoraphobia do not have a history of panic attacks (46% to 85%) and the prevalence rate of agoraphobia without panic disorder is similar to that of panic disorder (Wittchen et al., 2010). Within clinical settings, the prevalence of agoraphobia without panic disorder is substantially lower than in the general population (Wittchen et al., 2008). This difference is consistent with the lower rates of lifetime treatment for those with agoraphobia compared to those with panic disorder and may be due to lower rates of treatment seeking (Kessler et al., 2006).

Course of the Disorder

Agoraphobia develops later and with greater fluctuation in symptoms over the years compared to other anxiety disorders. It is unusual for children to be diagnosed with agoraphobia, as it typically emerges in early adulthood (Copeland et al., 2014). Most individuals with agoraphobia will meet for the diagnosis by age 20 (Kessler et al., 2005). Compared to other anxiety disorders, agoraphobia appears to be relatively unstable, with only 13% of adolescents with agoraphobia continuing to meet for the diagnosis after two years (Wittchen, Lieb, Pfister, & Schuster, 2000).

Agoraphobia is thought to develop through a number of etiological pathways. Historically, panic attacks have been conceptualized as a necessary precursor to developing agoraphobia (Katerndahl, 1989) or at least on the same spectrum as agoraphobia (Goisman et al., 1995). One study found that of individuals seeking treatment for comorbid agoraphobia and panic disorder, 27% developed agoraphobia within a week of the onset of panic disorder and 40% developed agoraphobia within 24 weeks of the onset of panic disorder (Mitsuru et al., 2005). However, agoraphobia may be developed for individuals who have no history of panic attacks. These individuals may instead develop fears of fainting, dizziness, urinating, or vomiting (Wittchen, Reed, & Kessler, 1998). Some community samples found that most individuals with agoraphobic fears did not have a history of panic attacks (Wittchen et al., 1998; Wittchen et al., 2008). Those diagnosed with agoraphobia without panic disorder are less likely to seek treatment compared to those with agoraphobia alone (Wittchen et al., 2008), which may explain the historical assumption that a causal relationship exists between panic disorder and agoraphobia.

Comorbid Disorders

Agoraphobia is associated with a number of other mental disorders, particularly other anxiety disorders. Of individuals diagnosed with agoraphobia, 11.7% met criteria for panic disorder, 15% met for separation anxiety disorder, and 22% met for GAD (Copeland et al., 2014). Both agoraphobia and agoraphobia with comorbid panic disorder are correlated with increased risk of experiencing another mental disorder compared to panic disorder alone (Brown et al., 2001; Kessler et al., 2006). The comorbidity patterns between agoraphobia and panic disorder differ slightly in that agoraphobia appears to be largely associated with other anxiety and phobic disorders, compared to panic disorder which is associated with a wider range of mental disorders (Wittchen et al., 2010). In addition to anxiety and mood disorders, agoraphobia is predictive of higher rates of alcohol and substance use disorders (Kessler et al., 2006), as well as personality disorders (Barlow, 2014).

Differential diagnostic issues

Agoraphobia exists as an independent diagnosis in the DSM-5 (APA, 2013) and may be diagnosed alone or with a comorbid disorder. Individuals with specific phobia, separation anxiety disorder, social anxiety disorder, and trauma related disorders may avoid similar situations to those with agoraphobia due to different reasons. Agoraphobia is distinct in that the individual fears they will not be able to escape or get help in the event that they experience embarrassing or incapacitating symptoms. Agoraphobia also differs from situational specific phobia in that individual fears at least two separate agoraphobic situations.

Separation Anxiety Disorder

Case presentation

Jasmine is an 8-year-old girl presenting with significant anxiety when separating from her mother. During her first week in kindergarten two years ago, Jasmine was sent home from school due to severe stomach aches. Ever since that incident, Jasmine's mother reported that her anxiety when leaving her mother's side has become problematic. Jasmine currently sleeps on her parent's bedroom floor, refuses to leave her mother when dropped off at school or a friend's house, and has outbursts of crying and yelling during separation. Jasmine also frequently complains of stomach aches in the mornings on school days and on other occasions when she anticipates separation from her mother. She reported fears that her mother will forget about her and never come back. Jasmine has missed several weeks of school and does not participate in sleepovers and play dates outside of her home. Jasmine has no difficulty separating from her father.

Characteristics and symptoms

Separation anxiety disorder (SAD) is characterized by excessive fear or anxiety related to separating from specific individuals or the home beyond what would be expected given the individual's age or development (APA, 2013). Individuals with SAD may fear and avoid leaving caregivers such as parents or other attachment figures such as spouses and children (Rochester & Baldwin, 2015). Symptoms of SAD include worry about what could happen during a separation, unwillingness to be separated, nightmares related to separation, and physical complains such as headaches or nausea when anticipating a separation (APA, 2013). Clinically significant symptoms of separation anxiety must persist for approximately 6 months in adults or a minimum of 4 weeks for those under 18 years of age. While not part of the diagnostic criteria for SAD, individuals may also experience sadness, social withdrawal, or anger when experiencing an unwanted separation.

Impairment and distress

Impairment with SAD is primarily related to the consequences of avoidance behaviors. Compared to other anxiety disorders occurring in childhood, SAD is associated with greater parental accommodations such as providing reassurances, assisting avoidance, and modifying family routines (Lebowitz et al., 2013). Individuals typically seek treatment when symptoms of SAD result in school refusal, difficulty working, or persistent somatic complaints (Masi, Mucci, & Millepiedi, 2001). Children with SAD may frequently be absent from school or other activities due to physical complaints, follow caregivers, or refuse to sleep alone. Younger children are most likely to report excessive worry about harm to caregivers and adolescents most often report physical complaints (Masi et al., 2001). Adults with SAD commonly experience difficulties at work and in social activities (Pini et al., 2010).

Differences from DSM-5

The diagnosis of SAD no longer requires onset of symptoms prior to adulthood (APA, 2013). The DSM-5 removed childhood onset from SAD criteria due to evidence that between one third to one half of adults with SAD symptoms report onset after 18 years of age (Silove et al., 2015). For example, we recently treated a woman with no prior history of SAD who experienced the onset of the disorder following the adoption of her daughter. When she presented for treatment, her daughter was 6 years old. The client was able to leave her daughter with her husband, who was a stay-at-home father, but was unable to leave her child with anyone else. She and her husband had not been on a date alone since their child was adopted as an infant. She also experienced anxiety and often avoided taking her child to places like a park where her view of her child might be momentarily obscured by another person or a piece of playground equipment.

Prevalence

Lifetime prevalence of SAD in the United States is estimated to be 4.1% in childhood and 6.6% by adulthood (Shear et al., 2006). SAD sharply declines following adolescence, with approximately 4% of 9-10 year olds experiencing symptoms in the last three months compared to 1% of 11-12 year olds (Copeland, Angold, Shanahan, & Costello, 2014). By adulthood, the 12-month prevalence of SAD is estimated to be 1.9% (Shear et al., 2006). SAD also occurs more commonly in females than males (Shear et al., 2006; Silove et al., 2015).

Course of the Disorder

The development of SAD in adults appears to follow one of two pathways. Individuals typically either experience SAD onset in childhood, at approximately 7-9 years of age, or onset occurs in adulthood, with a peak onset of 20 years of age (Masi et al., 2001; Pini et al., 2010). Of individuals reporting childhood onset of SAD, one third persist into adulthood (Shear, 2006). Many individuals first experience SAD in adulthood, with 43-77% of lifetime cases reporting onset after age 18 (Silove et al., 2015).

Previous developmental models suggesting that childhood SAD develops into panic disorder in adulthood are still debated (Masi et al., 2001; Silove et al., 2015). It appears that SAD and panic disorder share underlying traits common to the emotional disorders, including the tendency to use avoidance as a coping mechanism (Barlow, 2002). While SAD is predictive of experiencing other emotional disorders, it does not appear to predict panic disorder above and beyond other anxiety disorders (Kossowsky et al., 2013).

Comorbid Disorders

The majority of individuals with SAD (76-89%) also experience at least one other psychological disorder during their lifetime (Lewinsohn, Holm-Denoma, Small, Seeley, &

Joiner, 2008; Shear et al., 2006). Individuals with a history of SAD are likely to also have a history of another anxiety disorder, with comorbidity rates ranging from 10-37% for agoraphobia, social anxiety disorder, specific phobia, panic disorder, and GAD (Copeland et al., 2014; Shear et al., 2006). SAD is also associated with attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD), conduct disorder, posttraumatic stress disorder (PTSD), and mood disorders (Copeland et al., 2014; Shear et al., 2006; Silove et al., 2015). The high comorbidity of SAD with other psychological disorders is also notable due to the early onset of SAD compared to other emotional disorders.

Differential diagnostic issues

Historically, adults with SAD were frequently diagnosed with panic disorder prior to the addition of adult onset SAD to the DSM-5 (Rochester & Baldwin, 2015). SAD is distinct from panic disorder in that the fear surrounds separation instead of an unexpected panic attack, although SAD with panic attack specifier can be used to describe individuals who experience panic attacks during separation. While clients with SAD or agoraphobia may avoid leaving their home, the agoraphobic fear of not being able to escape is absent in SAD. Similarly, while SAD and GAD both involve excessive worry, the worry in SAD does not extend to a number of areas beyond fears regarding separation. Dependant and borderline personality disorders also share features with SAD such as fear of abandonment and dependency but are more generalized, affecting many of the client's relationships, whereas the fears with SAD only involve the specific attachment figures.

Selective Mutism

Case presentation

Ameer is a 5-year-old boy who does not talk with others outside of his immediate family. Ameer has attended preschool for a year and does not speak to peers or teachers. Ameer's parents reported that he was always "shy" and that his anxiety around others became a concern once he started school . Typically, he avoids eye contact and will respond to others nonverbally. When uncomfortable, he sometimes will interact with others by imitating a cat, his favorite animal. If he wants something while others are in the room, he will quietly whisper to his parents. When alone with his family, Ameer will talk in a normal volume and his parents do not have any concerns about his behavior or communication. Ameer's parents are concerned about his ability to learn and make friends at school, especially when he enters kindergarten.

Characteristics and symptoms

Selective mutism typically occurs in childhood and is characterized by not speaking when expected in social situations despite speaking normally in other situations, such as at home. The failure to speak is conceptualized as being due to anxiety (Muris & Ollendick, 2015). The failure to speak must occur consistently for at least one month and be associated with impairment in daily functioning (APA, 2013). Failure to speak during the first month of school is considered developmentally appropriate and does not warrant a diagnosis of selective mutism (APA, 2013). The DSM-5 specifies that lack of speech should not be related to the individual's unfamiliarity with the language or better explained by another disorder such as a communication or psychotic disorder. While not symptoms of selective mutism, individuals with the disorder are often characterized as shy, socially withdrawn, clingy, fearful of embarrassment, and oppositional (Krysanski, 2003).

Impairment and distress

Selective mutism is associated with impaired functioning in educational and occupational achievement as well as in social communication. Children diagnosed with selective mutism were rated as having less social skills compared to controls and being less likely to join groups and invite friends to their house (Cunningham, McHolm, Boyle, & Patel, 2004). The extent to which individuals with selective mutism experience academic impairment is debated (Cunningham et al., 2004; Nowakowski et al., 2009). While failure to speak at school limits children's ability to participate socially and academically (Hung, Spender, & Dronamraju, 2012), selective mutism may affect teachers' perceptions of their abilities more than their actual performance (Cunningham et al., 2004). Individuals with difficulty talking in a specific setting may not communicate their needs and subsequently suffer in silence.

Differences from DSM-5

The classification of selective mutism within the DSM has changed significantly over the years, consistent with the growing literature on the disorder. Once referred to as "elective mutism," the disorder's classification as "selective" in the fourth and fifth editions of the DSM removes the implication that the individual deliberately chooses not to speak (Muris & Ollendick, 2015). The major difference in the DSM-5 is the classification of selective mutism under "Anxiety Disorders" rather than under "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence" in the DSM-IV-TR (APA, 2000; APA, 2013). The disorder's criteria remain unchanged from the DSM-IV-TR.

Prevalence

Compared to other anxiety disorders, the diagnosis of selective mutism is relatively rare. Prevalence rates in clinical and school samples range from 0.2% to 1.9% in western countries (Elizur & Perednik, 2003; Kopp & Gillberg, 1997; Steinhausen & Juzi, 1996) and from 0.5% to

0.7% in the United States (Bergman, Piacentini, & McCracken, 2002; Chavira, Stein, Bailey, & Stein, 2004). Some studies found selective mutism to be slightly more prevalent in females than males (Cunningham et al., 2004; Steinhausen & Juzi, 1996). Selective mutism is even rarer in adolescents and adults, although individuals with a history of the disorder often struggle with other symptoms of anxiety into adulthood (Sharp, Sherman, & Gross, 2007).

Course of the Disorder

Symptoms of selective mutism typically are noticed upon enrollment in school, often the first novel setting outside the home in which children are consistently expected to talk (Cunningham et al., 2004; Muris & Ollendick, 2015). Consequently, the average age of onset is approximately two to five years old (Viana et al., 2009). The persistence of selective mutism is variable, ranging from several months to years (Cunningham et al., 2004; Krysanski, 2003; Remschmidt et al., 2001). Research on the longitudinal course of selective mutism suggests that many individuals continue to experience anxiety in social situations even after they no longer meet for a selective mutism diagnosis (Sharp et al., 2007).

Comorbid Disorders

Selective mutism is associated with a range of disorders and most commonly, other anxiety disorders. The majority of children with selective mutism meet for an additional anxiety diagnosis, with rates of comorbidity ranging from 33% to 74% (Muris & Ollendick, 2015; Sharp et al., 2007). Of the anxiety disorders, social anxiety disorder appears to occur most often with selective mutism with comorbidity rates in large clinically referred samples ranging from 45% to 100% (Muris & Ollendick, 2015). Some researchers argue that selective mutism may have a closely shared etiology with social anxiety disorder due to the high comorbidity between disorders (Muris & Ollendick, 2015; Sharp et al., 2007). Children with selective mutism may

also present with oppositional symptoms and aggressive behaviors, with the comorbidity of selective mutism and disruptive disorders ranging from 6% to 10% (Viana, Beidelm, & Rabian, 2008).

Differential diagnostic issues

The diagnostic criteria of selective mutism specify that the failure to speak must not be related to embarrassment associated with a communicative disorder or unfamiliarity with the language (APA, 2013). For example, an individual with childhood-onset fluency disorder who avoids talking due to fears of stuttering would not meet for a diagnosis of selective mutism. Individuals with neurodevelopmental disorders may also have difficulty speaking; however, selective mutism occurs when the individual has a demonstrated ability to speak appropriately in at least one situation, such as at home (Sharp et al., 2007). A diagnosis of selective mutism would also not be appropriate if the failure to speak occurs solely when experiencing symptoms associated with schizophrenia spectrum disorder or other psychotic disorders (APA, 2013). Other anxiety disorders, such as social anxiety disorder, may be diagnosed in combination with selective mutism if anxiety occurs in other situations besides speaking in social settings.

Specific Phobia

Case presentation

Robert is a 37-year-old male with fears of storms and tornados. When Robert was 10 years old, high winds from a thunder storm blew a lawn chair into his living room window, shattering the glass. Since then, he will not leave the house when it is raining due to fears of serious harm if a tornado occurs. During thunder storms, Robert will stay in the basement and loudly play music to lessen his distress. He also checks the weather report several times per day

to monitor whether there will be a storm. Robert has missed days at work due to his fears of storms and has difficulty coping with his distress when storms do occur.

Characteristics and symptoms

Specific phobia is characterized by persistent fear or anxiety about a specific object or situation that is disproportionate to the actual danger associated with the situation (APA, 2013). This fear is persistent, occurring for at least 6 months, and almost always experienced when the individual is faced with the feared situation. Individuals with specific phobias actively avoid the feared situation or will endure it with intense distress. To meet criteria for a diagnosis of specific phobia, the individual must experience significant distress or impairment due to the fear and avoidance symptoms. There are several subtypes of specific phobia determined by what the individual fears: animal, natural environment, blood-injection-injury, situational, and other (APA, 2013). Although not required for the diagnosis, individuals with blood-injection-injury subtype may experience an initial increase then decrease in heart rate and blood pressure, which is associated with vasovagal fainting (Witthauer et al., 2016). The physiological response to the blood-injection-injury subtype is distinct from the other subtypes, which are associated with an increase in overall arousal.

The development of a specific phobia may occur in several different ways (Barlow, 2002). Individuals with specific phobia may have experienced a frightening event associated with the feared stimulus, such as being bitten by a dog. A person may have learned the fear from important others in their life (e.g., the child becomes afraid the dentist after observing mom's fear of the dentist) or through informational transmission (e.g., a child becomes afraid of heights after watching news coverage of someone falling from a building). Phobias can also develop

after an individual experiences a panic attack during a feared situation. For example, a person who has a panic attack on routine flight might develop a phobia of flying.

Impairment and distress

Although specific phobia is more often given as a secondary diagnosis and not the target of treatment (Antony et al., 1994), the disorder is associated with significant impairment. The impairment is largely due to avoidance of the feared object or situation and is similar to the level of impairment experienced with other mental disorders (Becket et al., 2007). For example, individuals with a specific phobia of vomiting report abnormal eating behaviors such as avoiding eating food prepared by others and excessively checking freshness of food (Veale et al., 2012). More generally, having a diagnosis of specific phobia has been associated with increased risk of physical health disorders, including respiratory disease, migraines, arthritic conditions, and cardiac disease (Witthauer et al., 2016).

Differences from DSM-5

In contrast to the DSM-IV, an individual does not need to recognize that their fear or anxiety is unreasonable or excessive to meet criteria for specific phobia in the DSM 5 (APA, 2000; APA, 2013). While this insight was required in the DSM-IV to help distinguish specific phobia from delusional symptoms, research has evidenced that this requirement excluded individuals with poor insight whose symptoms were not better accounted for by a psychotic disorder (Menzies, Harris, & Jones, 1998). The DSM-5 also requires that symptoms must be present for at least 6 months for all individuals, whereas previously the specific phobia diagnosis did not specify a time criterion for adults (APA, 2000; APA, 2013).

Prevalence

Specific phobia is one of the most common mental health disorders. In the United States, 12.5% of people meet the diagnosis of specific phobia at one point in their life (Kessler et al., 2005). Prevalence rates of specific phobia appear stable over the lifetime, with international studies reporting a 12-month prevalence of 6-10% and lifetime prevalence of 7-13% (Becker et al., 2007; Wardenaar et al., 2017). Specific phobias are much less common outside of the United States and Europe, although there is significant variability across the world. Estimated 12-month prevalence rates are 4.2% in South Korea, 2.7% in Japan, 3.5% in Nigeria, and 4% in Mexico (Lewis-Fernández et al., 2010). Globally, females are approximately twice as likely to be affected as males (Wardenaar et al., 2017). Regarding the lifetime prevalence of each subtype, animal phobias are the most common (lifetime prevalence of 5%) followed by natural environment (2.6%), and situational (2.6%), blood-injection-injury (2.4%).

Course of the Disorder

Specific phobias typically emerge in childhood, with a median age of onset of 7 years old (Kessler et al., 2005). It is common for young children to have excessive and irrational fears; however, normative childhood fears differ from specific phobias because they are transitory and not impairing (APA, 2013). Specific phobias appear to be stable compared to other anxiety disorders, as 41% of children continued to meet for the diagnosis after a 10-year follow-up (Beesdo, Knappe, & Pine, 2009) and 75% of lifetime cases report clinically significant symptoms in the last 12 months (Kessler et al., 2012).

Comorbid Disorders

Specific phobias often co-occur with other anxiety disorders and may be predictive of developing other mental health disorders. Of individuals with specific phobia in childhood, 73% of them met criteria for an anxiety or depressive disorder after 10 years (Beesdo et al., 2009). It

is relatively unusual for an individual to present with only one specific phobia, with one study reporting that 75% of those with specific phobia had more than one clinically significant phobia (Curtis et al., 1998). Individuals are more likely to have a co-occurring anxiety disorder if they report multiple phobias, with comorbidity rates of 42% for individuals with one fear and 84% for individuals reporting 6-8 fears (Curtis et al., 1998). While specific phobia is rarely given as the primary diagnosis for those seeking treatment, it may be the most common secondary diagnosis in anxiety clients (Sanderson et al., 1990).

Differential diagnostic issues

When diagnosing specific phobia, it is necessary to determine if the fear is part of a cluster of symptoms characteristic of another disorder. Following a trauma, it is common for individuals to fear objects and situations that remind them of the trauma. However, this fear is captured as part of PTSD and other trauma related disorders and thus a diagnosis of specific phobia would be inappropriate. Similarly, specific phobia would not be appropriate for individuals whose fear is the object of their obsessions (for example, fear of dirt due to contamination obsessions in OCD) or those who fear specific social situations due to negative evaluation (for example, fear of embarrassment during a performance in social anxiety disorder). Agoraphobia can be distinguished from situational specific phobia by the reason for the fear and the number of situations avoided. In agoraphobia, the fear is that the person will not be able to escape if they experience panic or embarrassing symptoms. In contrast, an individual with situational specific phobia may fear being hurt or killed in the same situation. Additionally, agoraphobia requires that an individual fears at least two types of agoraphobic situations. If only one agoraphobic situation is feared, situational specific phobia may be applicable.

Social Anxiety Disorder

Case presentation

Winnie was a 21-year-old college student who presented for treatment for "shyness and problems being assertive." Winnie reported having no friends other than her boyfriend of 2 years, who had pursued the relationship with her. She felt anxious about initiating and maintaining conversations with peers, whom she feared would notice her anxiety and judge her as "odd" or "weird." She worked part-time at a restaurant and was unable to turn down co-worker requests for rides home, to cover their shift, or to borrow money because she feared that they would not like her if she said no. She also had difficulty participating in class discussions and giving class presentations because of her fears of negative evaluation.

Characteristics and symptoms

According to the DSM-5, the essential feature of social anxiety disorder is "marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others" (APA, 2013, p.202). The fear or anxiety must be due to concerns about negative evaluation due to visibility of anxiety symptoms or adequacy of social behavior. The feared social situations reliably produce anxiety and are avoided or endured with intense distress. The fear must be out of proportion to the danger and not appropriate to the sociocultural context. The fear must be present for at least 6 months and causes clinically significant distress or impairment. If another medical condition (e.g., severe acne) is present, the fear of negative evaluation and avoidance are either unrelated or clearly excessive. Individuals with fear of negative evaluation limited to speaking or performing in public are given the performance only specifier.

Impairment and distress

Most individuals with social anxiety disorder report serious impairment in their career, academic, and social functioning (e.g., Schneier et al., 1994; Katzelnick et al., 2001). In comparison to individuals with other anxiety disorders, individuals with social anxiety disorder have fewer friends and are less likely to marry (Rodebaugh, 2009; Sanderson et al., 1990). Compared to non-anxious controls, socially anxious individuals are less likely to enter careers that involve significant levels of interpersonal interactions and more likely to remain in jobs not congruent with their interests, work at a job below their educational attainment, and believe that they would be negatively evaluated by their supervisors (Bruch, Fallon, & Heimberg, 2003). Socially anxious individuals also report reduced work satisfaction and more sick days relative to those without the disorder (Fehm et al., 2008). Symptoms of social anxiety are associated with low life satisfaction, even after controlling for degree of disability (Hambrick, Turk, Heimberg, Schneier, & Liebowitz, 2003).

Differences from DSM-5

Prior to the DSM-5, social anxiety disorder was known as social phobia. The name social anxiety disorder was adopted because it more strongly conveys the pervasiveness and impairment characteristic of the disorder and better differentiates it from specific phobia (Heimberg et al., 2014). The first criterion for the disorder has been modified to emphasize fear of negative evaluation instead of fear of humiliation or embarrassment due to anxiety symptoms or behavior. Unlike DSM-IV, DSM-5 does not require that the person recognize that the fear is excessive or unreasonable. Instead, the clinician makes that judgment and must consider the individual's sociocultural context in making this determination. The DSM-IV required that social fears be unrelated to another psychiatric or medical condition (e.g., fear of negative evaluation due to showing a tremor in Parkinson's disease). The DSM-5 now allows the

diagnosis of social anxiety disorder in the presence of another medical condition if the social fears are unrelated or if the related social fears are excessive. For example, one study (Dalrymple et al., 2011) compared obese individuals with no psychiatric disorders, obese individuals with DSM-IV social anxiety disorder (i.e., clinically significant fear of negative evaluation not related to weight), and obese individuals with a clinically significant fear of negative evaluation limited to their weight (and who would consequently meet DSM-5 criteria for social anxiety disorder). The two social anxiety groups were more similar than different across a variety of clinical measures and had poorer social and overall functioning that the control group. The DSM-IV diagnosis assumed limited social fears, and a generalized subtype was assigned to clients who feared most social situations. The DSM-5 diagnosis takes the opposite approach and assumes social fears in multiple domains and includes a new specifier, performance only, if the fear is restricted to speaking or performing in public.

Prevalence

A large epidemiological study found that 12.1% of people suffer from social anxiety disorder at some point during their lives (Kessler et al., 2005), making it the fourth most common psychiatric disorder. Only major depressive disorder, alcohol abuse, and specific phobia were more prevalent. More conservative lifetime prevalence estimates suggest that the disorder affects 4% of the population (Narrow, Rae, Robins, & Regier, 2002). Social anxiety disorder is somewhat more common among women than men in epidemiological studies (Kessler et al., 1994; McLean, Asnaani, Litz, & Hofmann, 2011).

Course of the Disorder

Social anxiety disorder most commonly onsets during childhood or adolescence (Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992). It typically follows an unremitting

course in clinical samples (Bruce et al., 2005); however, remission is more common in epidemiological samples (Blanco et al., 2011; Vriends et al., 2007).

Comorbid Disorders

Approximately 70-80% of individuals with social anxiety disorder have additional diagnoses, and, in most cases, social anxiety disorder predates the onset of the comorbid condition (Magee, Eaton, Wittchen, McGonagle, & Kessler, 1996; Schneier et al., 1992). The most common additional diagnoses include specific phobia, agoraphobia, major depression, and alcohol use disorders.

Comorbidity with avoidant personality disorder (APD) is significant among individuals with generalized social fears (i.e., fear of most social situations). A review of seven studies found that, in samples of patients with social anxiety disorder, 25% to 73% (median 59%) have a comorbid diagnosis of APD (Chambless, Fydrich, & Rodebaugh, 2008). Perhaps not surprising given the overlapping criteria, researchers have had difficulty finding characteristics other than severity to differentiate social anxiety disorder and APD (e.g., Chambless et al., 2008). Consequently, many researchers have concluded that APD is a severe form of social anxiety disorder rather than a unique diagnostic entity.

Differential diagnostic issues

Socially anxious individuals may experience panic attacks in feared social situations (e.g., giving a speech). Socially anxious people may report great distress over panic attacks, but the distress is primarily due to concerns that others are judging them negatively because of their anxiety symptoms. In contrast, individuals with panic disorder report great distress over panic attacks due to the fear that the bodily sensations signal an impending catastrophe (e.g., fainting, heart attack, going crazy).

Clinicians sometimes have difficulty differentiating social anxiety disorder from paranoid personality disorder or "paranoia" in general. It may seem "paranoid" for socially anxious clients to fear that they are being judged by people in restaurants, that their roommates are laughing at them as they leave the room, or that they are scrutinized by other drivers or other people on the bus. This hypervigilance to negative evaluation may seem "paranoid" to most people who do not view others as highly critical sources of painful rejection or who do not view themselves as fundamentally unacceptable to others. In contrast, individuals with paranoid personality disorder typically have few concerns about falling short of the standards of others and view their own behavior as reasonable. Rather, they see the behavior of others as unjustifiably malevolent.

Generalized Anxiety Disorder

Case presentation

Kim is a 50-year-old divorced woman who lives alone. Kim presented for treatment due to extreme tension and pain in her shoulders, back, and jaw. She reported also recurrent headaches and gastrointestinal distress (e.g., diarrhea, stomach pain). When she had consulted physicians about these physical concerns, which she had experienced to varying degrees throughout her adult life, medical tests revealed that she was in good physical health. Kim came to treatment because she thought that anxiety might be influencing her symptoms. Kim describe multiple areas of worry, including her romantic relationship, projects at work, her health, her sibling who suffered from schizophrenia, and the future. She especially worried that she might die alone. She described frequently being keyed up and unable to relax, including having difficulty falling asleep at night due to her worries.

Characteristics and symptoms

The hallmark of GAD is excessive, uncontrollable worry occurring more days than not for at least six months (APA, 2013). The worry must concern a number of different domains or activities (e.g., school, work, finances, family, relationships, health). The worry or anxiety must be associated with at least three of the following six symptoms: (a) restlessness; (b) fatigue; (c) impaired concentration; (d) irritability; (e) muscle tension; and (f) sleep disturbance. The worry, anxiety, or physical symptoms must lead to significant distress or impairment. The anxiety and worry must not be due to another mental disorder (e.g., the worry cannot be limited to fear of negative evaluation as in social anxiety disorder or limited to worry about bodily sensations as in panic disorder). In addition, the disorder must not be due to a general medical condition or the direct physiological effects of a substance.

Impairment and distress

GAD is associated with significant distress and impairment and decreased quality of life. Persons seeking treatment for GAD report experiencing poorer quality of life than non-anxious individuals in the general population (Barrera & Norton, 2009). In community samples, GAD is associated with lower likelihood of satisfaction in family life, with one's sense of well-being, and in one's main activity, even after controlling for comorbid major depressive disorder (Stein & Heimberg, 2004). In a review of 34 empirical studies examining impairment and quality of life in GAD, individuals with GAD and a comorbid disorder were more impaired and reported a poorer quality of life than those with pure GAD, who were more impaired that those without the disorder (Hoffman, Dukes, & Wittchen, 2008). The impairment in pure GAD was similar to that produced by pure depression, other anxiety disorders, and chronic physical illnesses such as ulcers, arthritis, diabetes, and autoimmune disease.

Differences from DSM-5

The criteria for generalized anxiety disorder have not changed since the previous edition of the DSM.

Prevalence

Epidemiological studies suggest a lifetime prevalence rate of approximately 5% (Kessler, Berglund, Demler, et al., 2005; Kessler et al., 1994). The 12-month prevalence rate for GAD is 3.1% (Kessler, Chiu, et al., 2005). GAD is twice as common among women as men (Vesga-Lopez et al., 2008).

Course of the Disorder

The median age of onset for GAD is 31 years (Kessler, Berglund, Demler, et al., 2005). Age of onset is diverse, with 25% of cases with an onset before age 20, 50% with an onset between age 20 and age 47, and 25% with an onset after age 47. GAD typically has a chronic course, although symptoms may fluctuate in response to varying levels of life stressors. During a prospective study, 42% of individuals with DSM-III-R GAD at intake still had the disorder 12 years later (Bruce et al., 2005). On average, participants had clinically significant symptoms of GAD 74% of the time during the 12-year period of the study. Among primary care patients with GAD, the probability of symptom remission was .39 over 2 years (Rodriguez et al, 2006). However, of those patients whose symptoms remitted, 52% subsequently experienced either a full or partial relapse.

Comorbid Disorders

In a community sample, 89.8% of individuals with GAD had a comorbid disorder (Grant et al., 2005). In a large clinical sample, 77% of clients with GAD had one or more comorbid disorders (Goisman, Goldenberg, Vasile, & Keller, 1995). Among individuals seeking treatment for GAD, the most common comorbid diagnoses are unipolar depressive disorders and anxiety

disorders, especially social anxiety disorder, specific phobia, and panic disorder (Kessler, Berglund, Demler, et al., 2005; Kessler, Chiu, et al., 2005; Kessler et al., 1994; Ladouceur et al., 1999).

Differential diagnostic issues

The symptoms of GAD overlap with those of major depressive disorder (e.g., fatigue, difficulty concentrating, sleep disturbance). As previously stated, these disorders are highly comorbid, and research suggests a common genetic basis (Kendler, Neale, Kessler, Heath, & Eaves, 1992). Indeed, there is current controversy regarding whether it is best to consider these diagnoses the same or distinct diagnostic entities (Blanco et al., 2014). Symptoms such as loss of interest and pleasure are more characteristic of depressive disorders than anxiety disorders like GAD and may help with differentiation.

Transdiagnostic Model of Treatment

Rationale for the Transdiagnostic Model

There are several reasons to discuss anxiety treatment in terms of the transdiagnostic model. Cognitive behavioral therapy (CBT), specifically exposures, remains the most empirically supported treatment for anxiety (Deacon & Abramowitz, 2004). Research has focused on the development of disorder-specific manualized treatment, which has resulted in an abundance of similar treatment protocols for each disorder. Wilamowska et al. (2010) noted that, between the 15 manuals found for the treatment of panic disorder, there were no significant differences in the disorder was treated. These protocols consist of identical interventions, written to be specifically applicable to each disorder's manifestation of anxiety. However, due to the specificity of each treatment, it is difficult for clinicians to gain competence with the protocols for every possible disorder. Thus, the transdiagnostic model of treatment focuses on the core psychoeducation and interventions shown to be effective across the existing treatment protocols.

Another reason to focus on transdiagnostic models of treatment is the high rates of comorbidity across the anxiety and mood disorders (Brown et al., 2001). The large overlap in the prevalence of emotional disorders is consistent with the conceptualization of these disorders as having a shared etiology. The triple vulnerability model (Barlow, 2000) posits that generalized biological and psychological vulnerabilities underlie the development of all anxiety disorders. Transdiagnostic models of treatment target the common features found across the emotional disorders. Disorder-specific protocols are limited in that they are typically developed and tested on individuals who do not have additional comorbid diagnoses. Traditional protocols generally do not address how to treat individuals with comorbid disorders, while the transdiagnostic model allows for such flexibility (Clark, 2009). Specifically, transdiagnostic models of treatment target not only anxiety, but also major depressive disorder and other mood disorders (Barlow, 2002). As approximately 55% of individuals with a primary anxiety diagnosis also have a comorbid anxiety or mood diagnosis, the issue of treating comorbid diagnoses is persistent in clinical practice (Brown et al., 2001).

Transdiagnostic CBT has been empirically shown to reduce anxiety and depressive symptoms in adults, adolescents, and children. Meta-analyses including randomized controlled trials demonstrate that transdiagnostic CBT is more effective at treating anxiety and mood disorders than waitlists or treatment-as-usual groups and equally effective as disorder-specific CBT (García-Escalera, Chorot, Valiente, Reales, & Sandín, 2016; Reinholt & Krogh, 2014). Consistent with traditional disorder-specific protocols, transdiagnostic CBT was shown to have large overall effect sizes on adult anxiety and depression as well as medium effect sizes on child and adolescent anxiety and depression (García-Escalera et al., 2016; Queen, Barlow, & Ehrenreich-May, 2014). Group therapy utilizing transdiagnostic approaches has also been

shown to be effective at treating anxiety disorders, with symptom reductions better than controls and similar to disorder-specific CBT groups (Norton, 2012; Norton & Barrera, 2012; Norton & Hope, 2005). Promisingly, transdiagnostic CBT additionally appears to be associated with greater symptom reduction of comorbid diagnoses compared to disorder-specific CBT (García-Escalera et al., 2016; Norton et al., 2013). Transdiagnostic CBT is an effective treatment for anxiety, allowing clinicians to treat comorbid diagnoses concurrently as well as gain competence in a singular treatment approach rather than multiple disorder-specific protocols.

Motivational Enhancement

While CBT remains the most empirically supported treatment for anxiety disorders (Deacon & Abramowitz, 2004), clients need to be motivated to fully engage in the interventions for them to be effective. Although exposures – purposefully facing the subject of one's anxiety or fear – are shown to be effective at decreasing anxiety and avoidance behaviors, they are inherently distressing. Consequently, up to 15% to 30% of clients drop out from CBT treatment prematurely (Arch & Craske, 2009; Hans & Hiller, 2013). Motivational interviewing, a goal directed therapeutic approach, may be used to enhance clients' motivation to engage in treatment by exploring their ambivalence and considering the benefits of change. Incorporating motivational interviewing as a precursor to transdiagnostic CBT treatment has been shown to be effective at increasing adherence, homework completion, and treatment expectancies (Barrera, Smith, & Norton, 2016; Westra & Dozois, 2006). While motivational interviewing may improve client's ability to engage in treatment, anxiety symptom reduction is similar for those completing CBT treatment regardless of if they received motivation interviewing interventions. Recognizing and targeting clients' ambivalence towards engaging in CBT and exposure treatment may necessary to engage some clients in anxiety treatment.

Psychoeducation

Psychoeducation regarding the nature of anxiety and anxiety treatment is provided at the onset of CBT treatment. Trandiagnostic CBT introduces the utility of emotions more broadly, instead of focusing on the client's specific form of anxiety. Setting the groundwork for future CBT interventions, psychoeducation includes the functional nature of emotions, how anxiety is maintained through avoidance, the purpose of self-monitoring, and emotional awareness training (Barlow et al., 2011).

Functional Nature of Anxiety and Other Emotions

It may be difficult for clients to consider the functional nature of anxiety and other emotions when they are currently seeking treatment for an emotional disorder. Discussing how emotions are not "bad" even if they are distressing is important because clients may believe there is something wrong with them for experiencing these emotions. Treatment will not focus on completely ridding clients of distressing emotions, but rather on helping clients to tolerate the distress and understand how emotion-driven behaviors maintain their symptoms.

The emotions we experience are universal and evolutionarily adaptive. Emotions act as signals to engage in emotion-driven behaviors which are automatic and useful for survival (Barlow, 2008). Every emotion has a specific function (Barlow et al., 2011). Fear is an immediate response to danger; it causes a rush of autonomic arousal allowing us to act quickly to escape, fight, or freeze to avoid getting hurt. Anxiety occurs in anticipation of a future threats; it drives us to prepare for possible negative events by making us hypervigilant and focusing our attention on possible dangers. Depressed mood or sadness is a response to loss; it drives to us to withdraw from others so we can process the loss as well as acting as a signal to others that we might need support. Anger is a response to a perceived injustice or injury; it helps us to focus

our attention and energy on defending ourselves and our family. Guilt and shame occur when we believe we have hurt others or broken a societal expectation; they encourage us to mend relationships and maintain our roles in society. These emotions serve a specific function; however, they become maladaptive when they occur in inappropriate situations (Barlow et al., 2011). The fear and anxiety characteristic of anxiety disorders become maladaptive when these emotions occur in response to situations that are safe – such as someone with social anxiety disorder being afraid to give a presentation. To understand how emotions become maladaptive, it is helpful to conceptualize emotions as having three distinct components.

Emotions can be understood as having a cognitive, a physiological, and a behavioral component (Barlow, 2008). The cognitive component refers to the thoughts someone has when experiencing an emotion. These thoughts typically occur in a pattern which reveals how the person views themselves, others, and the world (Beck, 2011). For example, some thoughts common to panic disorder may be "it is dangerous for my heart to race" or "I might die from a heart attack if I have a panic attack." Subsequently, it makes sense that the person feels anxious and scared if they are having thoughts that they are going to die. The physiological component of emotions refers to the body's physical sensations experienced during the emotion. Common physiological responses with anxiety include increased heart rate, muscle tension, or sweating. The third component is behavioral – the actions one engages in or has the urge to engage in. A common anxiety driven behavior is to avoid the situation that induces anxiety. Increasing clients' awareness of how they behave in response to their emotions is an important step to counteracting these behaviors through interventions such as exposures or behavioral activation. The three components of emotions – thoughts, physiological reactions, and behaviors – continually interact and amplify our emotional responses. Clients can practice increasing their

awareness of the three components of emotions by recording their responses in problematic situations.

Maintenance of Anxiety

A major element of psychoeducation for clients with anxiety disorders is examining the role avoidance plays in maintaining their anxiety (Barlow, 2008). Avoidance is adaptive when the feared situation is dangerous. However, it can significantly interfere with clients' lives when the avoided situations are not actually dangerous. For example, an individual with social anxiety disorder may avoid meeting new people or attending social events. In these situations, avoidance maintains the individual's anxiety because they never get the opportunity to learn that the feared situations are safe and manageable (Barlow et al., 2011). Avoidance behaviors are also negatively reinforcing because the client is rewarded for avoiding the feared situation by the subsequent decrease in anxiety. The client feels better in the short term but anxiety is maintained over the long term. Anxious avoidance prevents clients from fully engaging in lives consistent with their goals and values.

Self-monitoring

Self-monitoring during treatment serves multiple purposes. It helps the client to increase their awareness of the three components of anxiety. This awareness will be important for later aspects of treatment such identifying thoughts during cognitive restructuring and identifying avoidance behaviors when developing exposures. Increased awareness also requires the client to be more present-focused and mindful of their own thoughts and experiences. That is, to complete the recording form, the client must suspend the cycle of anxiety to reflect on and record their symptoms. Self-monitoring additionally allows the client and therapist to accurately

discuss recent emotional events which may otherwise be misremembered by the time of session (Barlow, 2008).

An additional reason to incorporate self-monitoring into therapy is to record the client's progress across treatment. This monitoring may be done by using daily mood ratings or through formal measures of anxiety symptoms given each session. Assessing progress is an integral part of CBT (Beck, 2011) because it is necessary to identify when clients fail to respond to treatment to adapt interventions appropriately. Keeping a record of clients' progress is also useful as a motivational tool to reinforce clients' work in therapy, especially for clients who may feel that they are no longer progressing or that treatment is not working. Self-monitoring is a main component of transdiagnostic CBT and can easily be incorporated into homework assignments and/or the beginning of session.

Cognitive Restructuring

Cognitive restructuring consists of evaluating the accuracy of our thoughts and then developing more realistic appraisals of the situation (Barlow, 2008). Initially, clients practice by examining how their thoughts affect their emotional responses and behaviors. Cognitive distortions, thinking errors, and thinking traps all refer to the tendency to evaluate situations in an unrealistic way (Barlow, 2008; Norton, 2012). Common ways in which someone might get "stuck" is by over-estimating the likelihood that something bad will happen, catastrophizing the possible consequences of the event, and under-estimating one's ability to cope with negative events (Barlow et al., 2011; Moses & Barlow. 2006). Cognitive restructuring includes identifying how the anxious thoughts may not be realistic, challenging the thoughts by looking at the evidence, and then developing more realistic thoughts about the situation. These techniques

increase the client's flexibility in how they view feared situations. Exploring alternative, more realistic, potential outcomes is a core feature of cognitive restructuring.

Another goal of cognitive restructuring is to identify and challenge maladaptive core beliefs about how we view ourselves, others, and the world (Beck, 2011). These beliefs may be found by looking for patterns in the thoughts we experience or by questioning thoughts with the downward arrow technique. The downward arrow technique consists of questioning the deeper meaning of emotional thoughts by asking "what does this say about me?" and "what would happen if this was true?" (Barlow et al., 2011). Common themes in the maladaptive core beliefs of those with anxiety disorders are: I am a failure; others are critical of anything less than perfect; I am unlovable; the world is dangerous; and anxiety is bad (Norton, 2012). Once identified, these beliefs can be targeted with cognitive restructuring skills to help clients develop a more realistic worldview. Used together, these cognitive restructuring skills target unrealistic anxious thoughts and typically make it easier for clients to engage in exposures.

Emotion-Driven Behaviors and Avoidance

A primary component of transdiagnostic CBT is the modification of maladaptive emotion-driven behaviors (Barlow, 2008). Emotion-driven behaviors become maladaptive when they occur in inappropriate situations and interfere with the client's life. Emotion-driven behaviors also maintain the emotional state associated with them, causing a persistent pattern of anxiety, fear, or depression if these behaviors continue uninterrupted (Barlow, 2008). After clients identify and track maladaptive emotion-driven behaviors through self-monitoring, they can begin to work on modifying them by engaging in incompatible behaviors. For the social withdrawal typically of depressive disorders, an incompatible behavior would be engaging in behavioral activation, such as by leaving the house to spend time with a friend. For the

avoidance behaviors associated with anxiety, the incompatible behavior would be to face the feared situations.

Targeting Avoidance through Exposures

The avoidance of anxiety disorders is treated through exposures. Avoidance is a natural response to fear and anxiety; however, it can cause significant impairment when it prevents the individual from facing situations that are safe. Exposures consist of purposefully facing the feared situation without engaging in avoidance behaviors. Avoidance behaviors include blatantly escaping the situation, distracting oneself, engaging in subtle avoidance to prevent from being fully engaged in the situation, and safety signals (Barlow et al., 2011). Safety signals are items which provide relief from emotional distress because the individual may superstitiously believe that they decrease the likelihood of a negative event occurring (Barlow, 2002). For example, a person who is afraid of public speaking may insist in having a water bottle at the podium; the person may believe that they can get through the speech without their throat closing if they have their water bottle. By purposefully facing one's fears through exposures, the client disrupts the cycle of anxiety and avoidance which maintains their symptoms.

Exposures directly target the cognitive, physiological, and behavioral symptoms of anxiety disorders (Barlow, 2002). Exposures challenge the belief that a negative event will occur if the individual faces the feared situation. It is always a possibility that something bad will happen when a client faces their fears. They may be rejected by someone they ask on a date or the plane might crash during their flight. However, by engaging in exposures, the client has the opportunity to learn that the outcomes they fear are unlikely to occur and that, when something goes wrong, it does not have to be a catastrophe and they often cope with the feared outcome better than expected. Being rejected for a date does not mean that the client will die alone, and

turbulence on a flight does not mean that the plane will crash. Repeated exposures provide the evidence to challenge unrealistic anxious thoughts, allowing the client to view the feared situations more realistically.

Exposures target the physiological symptoms of anxiety through a process called habituation. Habituation is the natural decrease in physiological arousal and anxiety that one experiences when faced with the feared situation over time. Unlike avoidance, which only decreases anxiety in the short-term, habituation is associated with long term reductions in anxiety (Benito & Walther, 2015). Habituation may occur during the course of an exposure as well as after repeated exposures. Within session habituation is not necessary for exposure treatment to be effective and clients may see improvements in symptoms without experiencing a decrease in anxiety during an individual exposure task (Benito & Walther, 2015; Craske, Treanor, Conway, Zbozinek, & Vervliet, 2014).

By engaging in exposures, clients have the opportunity to practice and gain mastery over the behaviors they typically avoid (e.g., Hope, Heimberg, & Turk, 2010). Often, deficits in performance are the result of anxiety and avoidance rather than a genuine lack of skill. Over repeated exposures, such deficits often disappear as the client's anxiety decreases. For example, avoiding eye contact and speaking quickly during a presentation may be conceptualized as anxious avoidance rather than incompetence. Similarly, a person afraid of driving may break harshly or swerve unexpectedly because they are hypervigilant to potential accidents and startle easily. Continued exposures allow clients to practice engaging in feared behaviors without avoiding and decrease clients' urge to avoid over time.

Exposures are typically planned and gradual. The therapist and client first create a fear or distress hierarchy, which is a list of situations that provoke the client's anxiety and distress and

that are consistent with the client's treatment goals (Barlow et al., 2011; Norton, 2012). Exposures completed in session and as homework are planned based on the client's hierarchy. Within the transdiagnostic model of treatment, the hierarchy should include a range of situations associated with both the client's primary and secondary diagnoses (Norton, 2012). The hierarchy should also include situations that range from moderately to severely distressing to allow the client to gradually increase the intensity of their exposures over time. Engaging in moderately distressing exposures first may improve client's motivation to attempt more difficult exposures as well as improve their confidence in their ability to handle anxiety associated with exposures. Exposures are the most effective when engaged in regularly across multiple settings (Craske et al., 2014). Therefore, it is important for clients to continue exposures independently as part of homework to help generalize learning and maintain progress.

There are three types of exposures: in-vivo, imaginal, and interoceptive (Barlow et al., 2011). In-vivo exposures consist of directly facing the situations that provoke anxiety or distress. Examples include using an elevator for someone with agoraphobia, ordering food at a restaurant for someone with social anxiety disorder, or holding a beetle for someone with a specific phobia of insects. Imaginal exposures involve the client closing their eyes and picturing the distressing situation in great detail. The situation should be pictured from beginning to end, with a focus on the client's specific thoughts, images, emotions, and physical sensations. Imaginal exposures may be used when in-vivo exposures would not be practical or safe. Examples include using imaginal exposures to imagine being fired from work for someone with GAD or to imagine contracting a deadly disease for someone with contamination fears with OCD. Interoceptive exposures target the physical sensations associated with intense emotional experiences and panic attacks. Feared physical sensations are purposefully elicited through

exercises such as breathing through a straw to induce difficulty breathing or spinning in circles to induce dizziness. Each of the three types of exposures may be incorporated into a client's hierarchy depending on what the client fears and avoids.

Coping Skills to Modify Emotion-driven Behaviors

An additional way to modify emotion-driven behaviors is through coping skills typically incorporated into transdiagnostic CBT such as relaxation training and mindfulness (Reinholt & Krogh, 2014). These behaviors are often incompatible with emotion-drive behaviors such as hypervigilance, aggression, rumination, or worry (Moses & Barlow, 2006). It is important that the therapist emphasizes that the relaxation and mindfulness skills should not be used as an avoidance strategy. Subsequently, it would be inappropriate for clients to engage in relaxation skills such as diaphragmatic breathing or progressive muscle relaxation during an exposure. These skills would be incorporated more generally in the client's life to decrease their overall physiological arousal and increase their ability to live in the present moment without judgment.

Diaphragmatic breathing is a method of regulating our breathing to be more like how we naturally breathe when we are in a relaxed state. Breathing from the abdomen – as opposed to the chest – decreases physiological arousal while allowing the client to remain focused on the environment (Shiban et al., 2017). This skill should be practiced regularly, when the client is not anxious, for them to gain mastery over regulating their breathing before practicing this skill in other settings (Barlow & Craske, 2007). Diaphragmatic breathing is incompatible with the hyper-arousal typical across the emotional disorders. However, regulating breathing should not be taught as a means for clients to attempt to control or prevent their emotions.

Progressive muscle relaxation teaches clients to recognize tension in their muscles and then purposefully relax the tension. Clients first practice tensing and relaxing each muscle group

in isolation. This allows them to learn how to differentiate between tense and relaxed states. Gradually, clients practice tensing and relaxing larger muscle groups until they can relax on cue, decreasing overall physiological arousal (Chellew, Evans, Fornes-Vives, Pérez, & Garcia-Banda, 2015). When used consistently, progressive muscle relaxation can lead to decreases in physiological stress and act as an incompatible behavior to hyper vigilance (Chellew et al., 2015; Moses & Barlow, 2006).

Mindfulness, present-focused, purposeful, nonjudgmental awareness, is incompatible with the worry and rumination associated with emotional disorders (Orsillo & Roemer, 2011). In contrast to worry which focuses one's attention on potential threats in the future and rumination which focuses attention on perceived negative events from the past, mindfulness is the practice of maintaining awareness on the present moment. Clients can practice mindfulness by bringing their attention to their thoughts, emotions, physiological reactions, and environment. Mindfulness also requires the individual to practice acceptance, not judging themselves for having a specific thought or emotional reaction. Falling into the habit of worrying about the future or ruminating over the past is common; mindfulness involves noticing such thoughts and bringing attention back to the present moment. As with modifying other emotion-driven behaviors, mindfulness requires continued practice to become a habit.

Special Populations in Treatment

Transdiagnostic CBT has been shown to be effective with clients diverse in age, race, and diagnostic backgrounds (Barrera et al., 2016; Norton & Barrera, 2012; Queen et al., 2014) although additional research is needed. While existing research offers some suggestions for treatment issues specific to special populations, it is important to remain aware of individual differences across clients that might affect treatment. Consequently, regularly eliciting feedback

from clients is considered a necessary aspect of CBT sessions. Feedback allows the therapist to become aware of client's perception of progress, changes in their motivation, as well as the potential need to adapt interventions for the client to effectively use them. In combination with clinical recommendations for special populations, feedback is a useful tool for directing treatment.

Children and Adolescents

Anxiety disorders are the most common reason children and adolescents present for psychological treatment, and they also experience high rates of comorbidity (García-Escalera et al., 2016; Queen et al., 2014). Transdiagnostic CBT has been shown to be effective at treating comorbid anxiety and depression in both children and adolescents aged 7 to 17 (García-Escalera et al., 2016). Some adaptations with children and adolescents include involving parents in psychoeducation and treatment, adapting language and case examples to be developmentally appropriate, increasing the use of motivational enhancement, and increasing attention to rapport building (Ehrenreich, Goldstein, Wright, & Barlow, 2009). Cognitive abilities, motivation, emotional awareness, and independence vary significantly across children and adolescents. The extent to which parents are involved and the psychoeducation or cognitive restructuring skills are simplified depends on the age and abilities of the child. Flexibility in adapting interventions while maintaining true to the core features of transdiagnostic CBT should be considered for the treatment of children and adolescents with anxiety.

Older Adults

Older adults represent a diverse population in terms of pathology, values, and abilities. Randomized controlled trials evidence that CBT and transdiagnostic CBT are effective at treating anxiety and depression in older adults (Wuthrich & Rapee, 2013; Wuthrich, Rapee,

Kangas, & Perini, 2016). Although individuals with medical and cognitive impairments can be found within any age group, older adults are more likely to experience these issues, which may affect their ability to engage in certain CBT interventions. Presenting skills over multiple sessions, allowing opportunities to repeatedly practice skills, using large fonts, and adapting case examples to be relevant to issues common in older adults may improve older adults' ability to engage in interventions (Wuthrich & Rapee, 2013). The worry and rumination of older adults may focus on issues such as loneliness, isolation, grief, and fears of developing dementia or physical disability. Older adults with cognitive impairments associated with dementia or medical illnesses may have greater difficulty applying cognitive restructuring skills, which can either be simplified or eliminated from the individual's treatment plan (James, 2010). Medications and illnesses can also cause cognitive, physical, and behavioral symptoms that mirror mental disorders. Medical screenings therefore may be more pertinent for older adults prior to pursuing CBT treatment (James, 2010). These suggestions offer a brief overview of several issues specific to the growing population of older adults.

Clients with Suicidal Ideation or Self-Harming Behaviors

There is limited research on the use of transdiagnostic CBT for the treatment of clients with suicidal ideation or self-harming behaviors. Often clients at serious risk for hurting themselves are excluded from treatment studies, resulting in a lack of research on the effectiveness of these interventions with such clients (Norton et al., 2013; Queen et al., 2014). However, individuals with suicidal and self-harming ideations are not uncommon in mental health settings. Of those who attempted suicide within the year, approximately 70% met criteria for an anxiety disorder, 70% for a mood disorder, and 88% for any mental disorder (Kessler, Berglund, Borges, Nock, & Wang, 2005).

Transdiagnostic CBT treatment has and should been modified to include risk assessment and safety planning to reduce clients' risk during treatment (Queen et al., 2014). Additionally, CBT has been successfully used to treat high risk clients with previous suicide attempts and is associated with decreases in suicidal ideation and hopelessness (Stewart, Quinn, Pleyer, & Emmerson, 2009). When targeting suicidal ideation, behavioral interventions may include goal-setting, relaxation training, daily activity planning, and increasing distress tolerance (Stewart et al., 2009). Cognitive interventions focus on examining stressors and the subsequent thoughts, emotions, and behaviors. These steps are consistent with how transdiagnostic CBT targets any maladaptive emotional response, with a specific focus on suicidal ideation and behaviors. However, purposefully eliciting emotions (such as anxiety through exposures) as well as modifying emotion-driven behaviors are inherently distressing and stressful interventions. It is important that clients at risk for harming themselves or others are stable enough to tolerate the distress of these interventions without engaging in harmful behaviors. Additional training and supervision is advised for therapists utilizing transdiagnostic CBT with clients who have suicidal or self-harming behaviors.

Conclusion

Given their prevalence, mental health practitioners are likely to encounter anxiety disorders in their clinical work. The DSM-5 has made some changes to the anxiety disorder section of the manual, most notably moving some disorders to other sections (i.e., PTSD, OCD) and moving other disorders into the anxiety section (SAD). As reviewed above, some changes have been made to most of the anxiety diagnoses. The anxiety disorders overlap in terms of etiology and maintenance factors, and many of the same interventions may be effectively applied

to these different disorders. It is our hope that the information provided in this article helps clinicians to better serve their clients presenting with anxiety disorders.

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