

# Panic, Anxiety, Obsessions and their disorders

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# Anxiety

Anxiety involves a general feeling of apprehension about possible future danger, whereas fear is an alarm reaction that occurs in response to immediate danger. The DSM has identified a group of disorders—known as the anxiety disorders—that share symptoms of clinically significant anxiety or fear. Historically, anxiety disorders were considered to be classic neurotic disorders. Although individuals with neurotic disorders show maladaptive and self-defeating behaviors, they are not incoherent, dangerous, or out of touch with reality

# Distinguish between fear and anxiety

- There has never been complete agreement about how distinct the two emotions of fear and anxiety are from each other. Historically, the most common way of distinguishing between the fear and anxiety response patterns has been to determine whether a clear and obvious source of danger is present that would be regarded as real by most people. When the source of danger is obvious, the experienced emotion has been called fear. For example-
  - I am afraid of snakes
  - With anxiety, however, we frequently cannot specify clearly what the danger is ? For example-
  - I am anxious about my parents' health

# Fear and panic

When the fear response occurs in the absence of any obvious external danger, we say the person has had a spontaneous or **uncued panic attack**. The symptoms of a panic attack are nearly identical to those experienced during a state of fear except that panic attacks are often accompanied by a subjective sense of impending doom, including fears of dying, going crazy, or losing control. These latter cognitive symptoms do not generally occur during fear states.

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Fear and panic have three components:

1. Cognitive/subjective components (e.g., “I’m going to die”)
2. Physiological components (e.g., increased heart rate and heavy breathing)
3. Behavioral components (e.g., a strong urge to escape or flee). These components are only “loosely coupled” which means that someone might show, physiological and behavioral indications of fear or panic without much of the subjective component, or vice versa.

In humans who are having a panic attack, there is no external threat; panic occurs because of some misfiring of this response system.

# Components of fear and anxiety

Component	Fear	Anxiety
Cognitive/subjective	"I am in danger!"	"I am worried about what might happen."
Physiological	Increased heart rate, sweating	Tension, chronic overarousal
Behavioral	Desire to escape or run	General avoidance

# Anxiety disorders

Anxiety disorders are characterized by unrealistic, irrational fears or anxieties that cause significant distress and/or impairments in functioning. Among the disorders recognized in DSM-5 are:

- Specific phobia
- Social anxiety disorder (social phobia)
- Panic disorder
- Agoraphobia
- Generalized anxiety disorder

# Specific Phobias

Specific phobia is said to be present if a person shows strong and persistent fear that is triggered by the presence of a specific object or situation and leads to significant distress and/or impairment in a person's ability to function. When people with specific phobias encounter a phobic stimulus, they often show an immediate fear response that often resembles a panic attack except for the existence of a clear external trigger (APA, 2013). Not surprisingly, such individuals also experience anxiety if they anticipate they may encounter a phobic object or situation and so go to great lengths to avoid encounters with their phobic stimulus.

## DSM-5 Criteria for . . . Specific Phobia

- A. Marked fear or anxiety about a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood). Note: In children, the fear or anxiety may be expressed by crying, tantrums, freezing, or clinging.
- B. The phobic object or situation almost always provokes immediate fear or anxiety.
- C. The phobic object or situation is actively avoided or endured with intense fear or anxiety.
- D. The fear or anxiety is out of proportion to the actual danger posed by the specific object or situation and to the sociocultural context.
- E. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
- F. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- G. The disturbance is not better explained by the symptoms of another mental disorder, including fear, anxiety, and avoidance of situations associated with panic-like symptoms or other incapacitating symptoms.

# Specific Phobia case

## **A Mother's Fears**

Mary, a married mother of three, was 47 at the time she first sought treatment for anxiety. She reported being intensely afraid of enclosed spaces (claustrophobia) and of heights (acrophobia) since her teens. She said that as a child, her older siblings used to lock her in closets and hold her down under blankets while saying things to scare her. She traced the onset of her claustrophobia to those traumatic incidents, but she had no idea why she was afraid of heights. While her children had been growing up, she had been a housewife and had managed to live a fairly normal life in spite of her two specific phobias. However, her children were now grown, and she wanted to find a job outside her home. This was proving to be very difficult because she could not take elevators and was terrified of being any higher than the first floor of an office building. Moreover, her husband had for some years been working for an airline, which entitled him to free airline tickets. The fact that Mary could not fly (due to her phobias) had become a sore point in her marriage because they both wanted to be able to take advantage of these free tickets to travel to distant places. Thus, although she had had these phobias for many years, they had become truly disabling only in recent years as her life circumstances had changed and she could no longer easily avoid heights or enclosed spaces.

# Blood-injection injury phobia

One category of specific phobias that has a number of interesting and unique characteristics is **blood-injection injury phobia**.

- Occurs approximately 3 to 4 percent of the population
- Unique physiological response when confronted with the sight of blood or injury.
- Rather than showing the simple increase in heart rate and blood pressure these people show an initial acceleration, followed by a dramatic drop in both heart rate and blood pressure. nausea, dizziness, or fainting, which does not occur with other specific phobias
- This unique physiological response pattern only in the presence of blood and injury stimuli
- From an evolutionary and functional standpoint, this unique physiological response pattern may have evolved for a specific purpose: By fainting, the person being attacked might inhibit further attack, and if an attack did occur, the drop in blood pressure would minimize blood loss
- This type of phobia appears to be highly heritable

# Prevalence, Age of onset and gender differences in Specific Phobia

- occurring in about 12 percent of people at some point in their lifetime
- more common in women than in men, although the gender ratio varies by type of phobia
- about 90 to 95 percent of people with animal phobias are women,
- gender ratio is less than 2:1 for blood-injection-injury phobia.
- Animal phobias usually begin in childhood, as do blood-injection-injury phobias and dental phobias.
- other phobias such as claustrophobia and driving phobia tend to begin in adolescence or early adulthood

# Psychological Causal Factors

- **PSYCHOANALYTIC VIEWPOINT**

Phobias represent a defense against anxiety that stems from repressed impulses from the id. Because it is too dangerous to “know” the repressed id impulse, the anxiety is displaced onto some external object or situation that has some symbolic relationship to the real object of the anxiety (Freud, 1909). However, this prototypical psychodynamic account of how phobias are acquired was long criticized

- **PHOBIAS AS LEARNED BEHAVIOR**

- Wolpe and Rachman (1960) developed an account based on learning theory, which sought to explain the development of phobic behavior through classical conditioning. The fear response can readily be conditioned to previously neutral stimuli when these stimuli are paired with traumatic or painful events. We would also expect that, once acquired, phobic fears would generalize to other, similar objects or situations, for example, that Mary’s claustrophobia had probably been caused by multiple incidents as a child when her siblings locked her in closets and confined her under blankets to scare her. But as an adult, Mary feared elevators and caves as well as other enclosed places.
- Vicarious Conditioning -Simply watching a phobic person behaving fearfully with his or her phobic object can be distressing to the observer and can result in fear being transmitted from one person to another through vicarious or observational classical conditioning.

# Biological Causal Factors

- Lonsdorf and colleagues (2009) found that individuals who are carriers of one of the two variants of **the serotonin-transporter gene** (the s allele, which has been linked to heightened neuroticism) show superior fear conditioning than those without the s allele. Kagan and his colleagues (2001) found that **behaviorally inhibited toddlers** (who are excessively timid, shy, easily distressed, etc.) at 21 months of age were at higher risk of developing multiple specific phobias by 7 to 8 years of age than were uninhibited children (32 versus 5 percent).
- large twin studies show that monozygotic (identical) twins are more likely to share animal phobias and situational phobias (such as of heights or water) than were dizygotic (nonidentical) twins (Hettema, Prescott, et al., 2005; Kendler et al., 1999b).

# Treatments

- the most effective treatment for specific phobias is **exposure therapy**— a form of behavior therapy that involves controlled exposure to the stimuli or situations that elicit phobic fear. In exposure therapy, clients are encouraged to gradually expose themselves (either alone or with the aid of a clinician or friend) to their feared situations for long enough periods of time so that their fear begins to subside. One variant on this procedure, known as **participant modeling**, is often more effective than exposure alone. Here the therapist calmly models ways of interacting with the phobic stimulus or situation (Bandura, 1977, 1997). These techniques enable clients to learn that these situations are not as frightening as they had thought and that their anxiety, while unpleasant, is not harmful and will gradually dissipate. The new learning is believed to be mediated by changes in brain activation in the amygdala, which is centrally involved in the emotion of fear.
- For certain phobias such as small-animal phobias, flying phobia, claustrophobia, and blood-injury phobia, exposure therapy is often highly effective when administered in a single long session (of up to 3 hours). This can be an advantage because some people are more likely to seek treatment if they have to go only once. This treatment has also been shown to be highly effective in youth with specific phobias

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## Mary's Treatment

Mary participated in 13 sessions of graduated exposure exercises in which her clinician accompanied Mary first into mildly fear-provoking situations and then gradually into more and more fear-provoking situations. Mary also engaged in homework, doing these exposure exercises by herself. The prolonged in vivo (“real-life”) exposure sessions lasted as long as necessary for her anxiety to subside. Initial sessions focused on Mary’s claustrophobia and on getting her to be able to ride for a few floors in an elevator, first with the therapist and then alone. Later she took longer elevator rides in taller buildings. Exposure for the acrophobia consisted of walking around the periphery of the inner atrium on the top floor of a tall hotel and, later, spending time at a mountain vista overlook spot. The top step of Mary’s claustrophobia hierarchy consisted of taking a tour of an underground cave. After 13 sessions, Mary successfully took a flight with her husband to Europe and climbed to the top of many tall tourist attractions there.

# Social Anxiety Disorder (Social Phobia)

Social phobia (or social anxiety disorder) is characterized by disabling fears of one or more specific social situations (such as public speaking, urinating in a public bathroom, or eating or writing in public). In these situations, a person fears that she or he may be exposed to the scrutiny and potential negative evaluation of others or that she or he may act in an embarrassing or humiliating manner. Because of their fears, people with social phobia either avoid these situations or endure them with great distress. Intense fear of public speaking is the single most common type of social phobia. DSM-5 also identifies two subtypes of social phobia, one of which centers on performance situations such as public speaking and one of which is more general and includes nonperformance situations (such as eating in public).

# DSM-5 Criteria for Social Anxiety Disorder (Social Phobia)

- A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation, meeting unfamiliar people), being observed (e.g., eating or drinking), and performing in front of others (e.g., giving a speech). Note: In children, the anxiety must occur in peer settings and not just during interactions with adults.
- B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing; will lead to rejection or offend others).
- C. The social situations almost always provoke fear or anxiety. Note: In children, the fear or anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.
- D. The social situations are avoided or endured with intense fear or anxiety.
- E. The fear or anxiety is out of proportion to the actual threat posed by the social situation and to the sociocultural context.
- F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
- G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
- I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.
- J. If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.

# Case of Social Phobia

Barry, a 22-year-old white male, was a student experiencing intense anxiety in confronting social situations when he first presented for treatment. He had a 10-year history of social phobia. His phobia significantly affected his college attendance, academic performance, and his social relationships. He would avoid people as he was afraid that others would find him boring and foolish. He was often preoccupied with a negative self-image; he would imagine himself in the middle of the class, with all his peers laughing at him. He was extremely anxious whenever he was asked to make a presentation or answer a question in class. Even though he often knew the answer, he could never summon up the courage to speak for fear that his professors and peers would evaluate him negatively and ridicule him. Whenever he had to confront any social situation, his heart would start racing, his hands would tremble, and he would be unable to speak. As a result, he almost always avoided such situations, preferring to be by himself. Since his early childhood, Barry had undergone a great deal of stress. His mother passed away when he was seven years old. His father favored his elder brother, who was very social and liked by all. His brother was admired by relatives and friends, but little such attention was paid to Barry. In high school, Barry's classmates teased him a lot. He was often ridiculed for having "funny" facial expressions and was taunted as a coward.

It was because of these multiple stressors since his school days that he had gradually started withdrawing from social situations. Losing his mother at a young age probably contributed to Barry's sense of threat and anxiety. As a result of his father's rejection, he continued to fear being negatively evaluated. This fear intensified, and he continued to avoid social situations.

# Prevalence, Age of onset and gender differences

- Approximately 12 percent of the population meets the diagnostic criteria for social phobia at some point in their lives
- Social phobia is more common among women (about 60 percent of sufferers are women) typically begins during adolescence or early adulthood
- Nearly two-thirds of people with social phobia suffer from one or more additional anxiety disorders at some point in their lives, and about 50 percent also suffer from a depressive disorder at the same time
- Approximately one-third abuse alcohol to reduce their anxiety and help them face the situations they fear (for example, drinking before going to a party; Magee et al., 1996).
- Moreover, because of their distress and avoidance of social situations, people with social phobia, on average, have lower employment rates and lower socioeconomic status
- Approximately one-third have severe impairment in one or more domains of their life (Harvey et al., 2005; Ruscio et al., 2008).
- The disorder is remarkably persistent, with one study finding that only about a third recover spontaneously over a 12-year period

# Psychological Causal Factors

Like specific phobias, social phobia generally involves learned behaviors that have been shaped by evolutionary factors.

## **SOCIAL PHOBIA AS LEARNED BEHAVIOR**

Social phobia often seems to originate from simple instances of direct or vicarious classical conditioning such as experiencing or witnessing a perceived social defeat or humiliation, or being or witnessing the target of anger or criticism.

## **SOCIAL FEARS AND PHOBIA IN AN EVOLUTIONARY CONTEXT**

Social fears and phobia by definition involve fears of members of one's own species. Humans have an evolutionarily based predisposition to acquire fears of social stimuli that signal dominance and aggression from other humans. These social stimuli include facial expressions of anger or contempt, which on average all humans seem to process more quickly and readily than happy or neutral facial expressions (Öhman, 2009; Schupp et al., 2004). In a series of experiments that paralleled ones for specific phobias, Öhman and colleagues demonstrated that subjects develop stronger conditioned responses when slides of angry faces are paired with mild electric shocks than when happy or neutral faces are paired with the same shocks.

## **PERCEPTIONS OF UNCONTROLLABILITY AND UNPREDICTABILITY**

Being exposed to uncontrollable and unpredictable stressful events (such as parental separation and divorce, family conflict, or sexual abuse) may play an important role in the development of social phobia (Mathew et al., 2001; Mineka & Zinbarg, 2006). Perceptions of uncontrollability and unpredictability often lead to submissive and unassertive behavior, which is characteristic of people who are socially anxious or phobic.

## **COGNITIVE BIASES**

factors also play a role in the onset and maintenance of social phobia. Beck and colleagues (1985) suggested that people with social phobia tend to expect that other people will reject or negatively evaluate them. They argued that this leads to a sense of vulnerability when they are around people who might pose a threat.

# Biological Causal Factors

The most important **temperamental variable is behavioral inhibition**, which shares characteristics with both **neuroticism and introversion** (Bienvenu et al., 2007). Behaviorally inhibited infants who are easily distressed by unfamiliar stimuli and who are shy and avoidant are more likely to become fearful during childhood and, by adolescence, to show increased risk of developing social phobia. For example, one classic study was conducted on behavioral inhibition as a risk factor in a large group of children, most of whom were already known to be at risk for anxiety because their parents had an emotional disorder. Among these children, those who had been assessed as being high on behavioral inhibition between 2 and 6 years of age were nearly three times more likely to be diagnosed with social phobia (22 percent) even in middle childhood (average age of 10) than were children who were low on behavioral inhibition at 2 to 6 years (8 percent; Hirshfeld-Becker et al., 2007). Results from twin studies have shown that there is a modest genetic contribution to social phobia; estimates are that about 30 percent of the variance in liability to social phobia is due to genetic factors (Hettema, Prescott, et al., 2005; Smoller et al., 2008). Nevertheless, these studies suggest that an even larger proportion of variance in who develops social phobia is due to nonshared environmental factors, which is consistent with a strong role for learning.

# Treatments

## COGNITIVE AND BEHAVIORAL THERAPIES

As with specific phobias, **prolonged and graduated exposure to the feared situation (in this case, social situations), has proven to be a very effective treatment.** As research has revealed the underlying **distorted cognitions** that characterize social phobia, **cognitive restructuring techniques have been added to the behavioral techniques**, generating a form of **cognitive-behavioral therapy** (Barlow et al., 2007). In cognitive restructuring the therapist attempts to help clients with social phobia identify their underlying negative, automatic thoughts (“I’ve got nothing interesting to say” or “No one is interested in me”). After helping clients understand that such automatic thoughts (which usually occur just below the surface of awareness but can be accessed) often involve cognitive distortions, the therapist helps the clients change these inner thoughts and beliefs through logical reanalysis. The process of logical reanalysis might involve asking oneself questions to challenge the automatic thoughts: “Do I know for certain that I won’t have anything to say?” “Does being nervous have to lead to or equal looking stupid?”

In one highly effective version of such treatments, clients may be assigned exercises in which they manipulate their focus of attention (internally versus externally) to demonstrate to themselves the adverse effects of internal self-focus. They may also receive videotaped feedback to help them modify their distorted self-images. Such techniques have been very successfully applied to the treatment of social phobia.

# Barry's Treatment

Barry underwent evidence-based cognitive-behavior therapy (CBT). The therapist worked together with Barry to identify his underlying negative thoughts about himself. He was made to understand how such thoughts involved cognitive distortions, which then led to him avoiding social situations. Through the process of logical thinking, Socratic questioning, and behavioral experiments, he was encouraged to challenge, test, and modify his negative beliefs and self-images. Several homework assignments were given, which Barry undertook with great interest; he was highly motivated to get rid of his fear and anxiety. A lot of the work that Barry did with his CBT therapist focused on decreasing and eliminating avoidance and gradually facing social situations. At the same time, he was made to challenge his negative thoughts about these situations and test his fears. He went through 15 weekly therapy sessions. His self-confidence and ability to confront social situations improved significantly. He became comfortable in social situations and his interactions with others improved. He started making friends, lost his fear of answering questions in class, made good class presentations, and received positive feedback from his peers and professors.

# Continued----- treatments

## **MEDICATIONS**

Unlike specific phobias, social phobia can sometimes be effectively treated with medications. The most effective and widely used medications are several categories of antidepressants (including the monoamine oxidase inhibitors and the selective serotonin reuptake inhibitors). In some studies, the effects of these antidepressant medications have been comparable to those seen with cognitive-behavioral treatments. However, in several studies, the newer version of cognitive-behavior therapy discussed earlier produced much more substantial improvement than did medication (Clark, Ehlers, et al., 2003). Moreover, the medications must be taken over a long period of time to help ensure that relapse does not occur (Stein & Stein, 2008). A distinct advantage of behavioral and cognitive-behavioral therapies over medications, then, is that they generally produce more long-lasting improvement with very low relapse rates; indeed, clients often continue to improve after treatment is over. Finally, several studies have also suggested that when d-cycloserine is added to exposure therapy, the treatment gains occur more quickly and are more substantial (Guastella et al., 2008).

# Panic Disorder

Panic disorder is defined and characterized by the occurrence of panic attacks that often seem to come “out of the blue.” According to the DSM-5 criteria for panic disorder, the person must have experienced recurrent, unexpected attacks and must have been persistently concerned about having another attack or worried about the consequences of having an attack for at least a month. Panic attacks often are “unexpected” or “uncued” in the sense that they do not appear to be provoked by identifiable aspects of the immediate situation. Indeed, they sometimes occur in situations in which they might be least expected, such as during relaxation or during sleep (known as nocturnal panic). In other cases, however, panic attacks are said to be situationally predisposed, occurring only sometimes while the person is in a particular situation such as while driving a car or being in a crowd.

Panic attacks are **physical**, it is not surprising that as many as **85 percent of people** having a panic attack may show up repeatedly at **emergency departments** or physicians’ offices for what they are convinced is a medical problem—usually **cardiac, respiratory, or neurological**.

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Unfortunately, a correct diagnosis is often not made for years due to the normal results on numerous costly medical tests. Further complications arise because patients with cardiac problems are at a nearly twofold elevated risk for developing panic disorder (Korczak et al., 2007). Prompt diagnosis and treatment are also important because panic disorder causes approximately as much impairment in social and occupational functioning as that caused by major depressive disorder (Roy-Byrne et al., 2008) and because panic disorder can contribute to the development or worsening of a variety of medical problems.

# Case of Panic Disorder

Jackson is a 21-year-old college student who came to his university's mental health clinic complaining of unexplainable panic attacks. He reports experiencing these attacks for about a year, and is coming for treatment now because they have been increasing in frequency and have gotten to the point of interfering significantly with his ability to pay attention in class and to interact with his friends socially. Jackson describes his panic attacks as coming on completely out of the blue. They are typically characterized by feelings of derealization, extreme panic, and a strong desire to leave whatever situation he is in, and physical symptoms of racing heart, dizziness, sweating, chest pains, and shortness of breath. Jackson has these panic attacks at seemingly random times, but they occur most often in the shower, during his morning classes, and in the dining hall. Because of the distress experienced during these attacks and out of fear of having more attacks, Jackson has been showering less frequently, leaving class whenever he thinks a panic attack may be coming, and he no longer eats in the dining hall. He also has begun drinking alcohol earlier and earlier each evening because he has noticed that alcohol calms his anxiety and seems to decrease the amount of panic he experiences during the evening.

# DSM-5 Criteria for Panic Disorder

- A. Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur: Note: The abrupt surge can occur from a calm state or an anxious state. 1. Palpitations, pounding heart, or accelerated heart rate. 2. Sweating. 3. Trembling or shaking. 4. Sensations of shortness of breath or smothering. 5. Feelings of choking. 6. Chest pain or discomfort. 7. Nausea or abdominal distress. 8. Feeling dizzy, unsteady, light-headed, or faint. 9. Chills or heat sensations. 10. Paresthesias (numbness or tingling sensations). 11. Derealization (feelings of unreality) or depersonalization (being detached from oneself). 12. Fear of losing control or “going crazy.” 13. Fear of dying. Note: Culture-specific symptoms (e.g., tinnitus, neck soreness, headache, uncontrollable screaming or crying) may be seen. Such symptoms should not count as one of the four required symptoms.
- B. At least one of the attacks has been followed by 1 month (or more) of one or both of the following: 1. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, “going crazy”). 2. A significant maladaptive change in behavior related to the attacks (e.g., behaviors designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).
- C. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism, cardiopulmonary disorders).
- D. The disturbance is not better explained by another mental disorder (e.g., the panic attacks do not occur only in response to feared social situations, as in social anxiety disorder; in response to circumscribed phobic objects or situations, as in specific phobia; in response to obsessions, as in obsessive compulsive disorder; in response to reminders of traumatic events, as in posttraumatic stress disorder; or in response to separation from attachment figures, as in separation anxiety disorder).

# Agoraphobia

Historically, agoraphobia was thought to involve a fear of the agora—the Greek word for “open gathering place.” In agoraphobia the most commonly feared and avoided situations include streets and crowded places such as shopping malls, movie theaters, and stores. Standing in line can be particularly difficult. **Sometimes, agoraphobia develops as a complication of having panic attacks in one or more such situations.** Concerned that they may have a panic attack or get sick, people with agoraphobia are anxious about being in places or situations from which escape would be difficult or embarrassing, or in which immediate help would be unavailable if something bad happened. Typically people with agoraphobia are also frightened by **their own bodily sensations**, so they also avoid activities that will create arousal such as exercising, watching scary movies, and even engaging in sexual activity. As agoraphobia first develops, people tend to avoid situations in which attacks have occurred, but usually the avoidance gradually spreads to other situations where attacks might occur.

In moderately severe cases- anxious even when venturing outside their homes alone.

In very severe cases - disabling disorder in which a person cannot go beyond the narrow confines of home/even particular parts of the home.

# Case of Panic disorder with Agoraphobia

John D. was a 45-year-old married European American man with three sons. Although well-educated and successful . . . John had been experiencing difficulties with panic attacks for 15 years . . . experiencing two to five panic attacks per month. The previous week John had a panic attack while driving with his family to a computer store. He recollected that before the panic attack he might have been “keyed up” over the kids making a lot of noise in the back seat; the attack began right after he had quickly turned around to tell the kids to “settle down.” Immediately after he turned back to look at the road, John felt dizzy. As soon as he noticed this, John experienced a rapid and intense surge of other sensations including sweating, accelerated heart rate, hot flushes, and trembling. Fearing that he was going to crash the car, John quickly pulled to the side of the road. . . . John was having only a few panic attacks per month, but he was experiencing a high level of anxiety every day, focused on the possibility that he might have another panic attack at any time. Indeed, John had developed extensive apprehension or avoidance of driving, air travel, elevators, wide-open spaces, taking long walks alone, movie theaters, and being out of town. [His] first panic attack had occurred 15 years ago.

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John had fallen asleep on the living room sofa at around 1:00 a.m. after returning from a night of drinking with some of his friends. Just after awakening at 4:30, John felt stomach pains and a pulsating sensation in the back of his neck. All of a sudden, John noticed that his heart was racing, too. . . . Although he did not know what he was suffering from, John was certain that he was dying. John remembered having a second panic attack about a month later. From then on, the panic attacks began to occur more regularly. When the panic attacks became recurrent, John started to avoid situations in which the panic attacks had occurred as well as situations in which he feared a panic attack was likely to occur. On three occasions during the first few years of his panic attacks, John went to the emergency department of his local hospital because he was sure that his symptoms were a sign of a heart attack.

# DSM-5 Criteria for Agoraphobia

- A. Marked fear or anxiety about two (or more) of the following five situations: 1. Using public transportation (e.g., automobiles, buses, trains, ships, planes). 2. Being in open spaces (e.g., parking lots, marketplaces, bridges). 3. Being in enclosed places (e.g., shops, theaters, cinemas). 4. Standing in line or being in a crowd. 5. Being outside of the home alone.
- B. The individual fears or avoids these situations because of thoughts that escape might be difficult or help might not be available in the event of developing panic-like symptoms or other incapacitating or embarrassing symptoms (e.g., fear of falling in the elderly; fear of incontinence).
- C. The agoraphobic situations almost always provoke fear or anxiety.
- D. The agoraphobic situations are actively avoided, require the presence of a companion, or are endured with intense fear or anxiety.
- E. The fear or anxiety is out of proportion to the actual danger posed by the agoraphobic situations and to the sociocultural context.
- F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
- G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
- H. If another medical condition (e.g., inflammatory bowel disease, Parkinson's disease) is present, the fear, anxiety, or avoidance is clearly excessive.
- I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder—for example, the symptoms are not confined to specific phobia, situational type; do not involve only social situations (as in social anxiety disorder); and are not related exclusively to obsessions (as in obsessive compulsive disorder), perceived defects or flaws in physical appearance (as in body dysmorphic disorder), reminders of traumatic events (as in posttraumatic stress disorder), or fear of separation (as in separation anxiety disorder)

# Prevalence, Age of onset and gender differences

Approximately 4.7 percent of the adult population has had panic disorder with or without agoraphobia at some time in their lives, typically begins in the 20s to the 40s, but sometimes begins in the late teen years (Kessler, Chiu, et al., 2006). Once panic disorder develops, it tends to have a chronic and disabling course, although the intensity of symptoms often waxes and wanes over time (White & Barlow, 2002).

Indeed, one 12-year longitudinal study found that less than 50 percent of patients with panic disorder with agoraphobia had recovered in 12 years, and 58 percent of those who had recovered at some point had a recurrence (new onset; Bruce et al., 2005). **Panic disorder is about twice as prevalent in women** as in men (Eaton et al., 1994; White & Barlow, 2002). **Agoraphobia also occurs much more frequently in women** than in men, and the percentage of women increases as the extent of agoraphobic avoidance increases. Among people with **severe agoraphobia, approximately 80 to 90 percent are female** (Bekker, 1996; White & Barlow, 2002).

# Comorbidity with Other Disorders

The vast majority of people with panic disorder (83 percent) have at least one comorbid disorder, most often generalized anxiety disorder, social phobia, specific phobia, PTSD, depression, and substance-use disorders. Depression is especially common among those with panic disorder, with approximately 50 to 70 percent of people with panic disorder experiencing serious depression at some point in their lives. Perhaps related to the fear of having a panic attack, they may also meet criteria for dependent or avoidant personality disorder. Although people often think of suicide as being especially associated with depression, a major study in the 1980s reported that panic disorder is a strong predictor of suicidal behavior.

# The timings of a first panic attack

Although panic attacks themselves appear to come “out of the blue,” the first one frequently occurs following feelings of distress or some highly stressful life circumstance such as loss of a loved one, loss of an important relationship, loss of a job, or criminal victimization. Not all but some studies have estimated that approximately 80 to 90 percent of people report that their first panic attack occurred after one or more negative life events.

# Biological causal factors of panic disorder

- **Genetic factors**

In a large twin study, López-Solà and colleagues (2014) estimated that 30 to 34 percent of the variance in liability to panic symptoms is due to genetic factors.

This genetic vulnerability is manifested at a psychological level at least in part by the important personality trait called neuroticism.

- **Panic and the brain**

One relatively early prominent theory about the neurobiology of panic attacks implicated the locus coeruleus in the brain stem and a particular neurotransmitter—norepinephrine—that is centrally involved in brain activity in this area.

Today it is recognized that it is increased activity in the amygdala that plays a more central role in panic attacks than does activity in the locus coeruleus.

# Continued-----

- **Biochemical abnormalities**

Klein (1981) and others (Sheehan, 1982, 1983) argued that panic attacks are alarm reactions caused by biochemical dysfunctions. This hypothesis initially appeared to be supported by numerous studies during the past 40 years, showing that people with panic disorder are much more likely to experience panic attacks when they are exposed to various biological challenge procedures than are normal people or people with other psychiatric disorders. Some of these laboratory tests involve infusions of sodium lactate, inhaling air with altered amounts of carbon dioxide, or ingesting large amounts of caffeine. In each case, such procedures produce panic attacks in panic disorder clients at a much higher rate than in normal subjects. There is a broad range of these so-called panic provocation procedures, and some of them are associated with quite different and even mutually exclusive neurobiological processes. Thus, no single neurobiological mechanism could possibly be implicated.

# Psychological causal factors

- **Cognitive theory of panic**

The cognitive theory of panic disorder proposes that people with panic disorder are hypersensitive to their bodily sensations and are very prone to giving them the most dire interpretation possible. For example, a person who develops panic disorder might notice that his heart is racing and conclude that he is having a heart attack, or notice that he is dizzy, which may lead to fainting or to the thought that he may have a brain tumor. These very frightening thoughts may cause many more physical symptoms of anxiety, which further fuel the catastrophic thoughts, leading to a vicious circle culminating in a panic attack.

# Continued-----

- **Comprehensive learning theory of panic disorder**

Initial panic attacks become associated with initially neutral internal (interoceptive) and external (exteroceptive) cues through an interoceptive conditioning or exteroceptive conditioning process, which leads anxiety to become conditioned to these CSs, and the more intense the panic attack, the more robust the conditioning that will occur.

- **Anxiety sensitivity and perceived control**

Cognitive and learning explanations of panic and agoraphobia have looked at a number of different factors that can generally be explained within either the cognitive or learning perspective. For example, people who have high levels of anxiety sensitivity—a trait-like belief that certain bodily symptoms may have harmful consequences—are more prone to developing panic attacks and perhaps panic disorder. People with anxiety sensitivity endorse statements such as “When I notice that my heart is beating rapidly, I worry that I might have a heart attack.” Anxiety sensitivity has been shown to predict the development of panic attacks.

# Continued-----

- **Safety behaviors and the persistence of panic**

Some people with panic disorder may, for example, have three or four panic attacks a week for 20 years; each time they may believe they are having a heart attack, and yet they never do. After experiencing hundreds or thousands of panic attacks without having a heart attack, one would think, from the cognitive perspective, that this catastrophic thought would have been proved wrong so many times that it would finally go away. However, evidence suggests that such disconfirmation does not occur because people with panic disorder frequently engage in safety behaviors (such as breathing slowly or carrying a bottle with anxiolytic medication) before or during an attack. They then mistakenly tend to attribute the lack of catastrophe to their having engaged in this safety behavior rather than to the idea that panic attacks actually do not lead to heart attacks.

- **Cognitive biases and the maintenance of panic**

People with panic disorder also seem to have their attention automatically drawn to threatening information in their environment such as words that represent things they fear, such as palpitations, numbness, or faint.

# Treatments

- **Behavioral and cognitive-behavioral treatments**

The original behavioral treatment for agoraphobia from the early 1970s involved prolonged exposure to feared situations, often with the help of a therapist or family member. Similar to what is done with specific and social phobias, the idea was to make people gradually face the situations they feared and learn that there was nothing to fear. Such exposure-based treatments were quite effective and helped about 60 to 75 percent of people with agoraphobia show clinically significant improvement (Barlow et al., 2007). These effects were generally well maintained at 2- to 4-year followup. But this left approximately 25 to 40 percent not improved to a clinically significant degree.

One limitation of these original treatments was that they did not specifically target panic attacks. In the mid1980s, two new techniques were developed

➤ ***Interoceptive exposure*** meaning deliberate exposure to feared internal sensations. The idea was that fear of these internal sensations should be treated in the same way that fear of external agoraphobic situations is treated—namely, through prolonged exposure to those internal sensations so that the fear may extinguish. For example, people are asked to engage in various exercises that bring on various internal sensations (e.g., spinning in a chair, hyperventilating, running in place) and to stick with those sensations until they subside, thereby allowing habituation of their fears of these sensations.

# Continued-----

## ➤ *Cognitive restructuring techniques*

### *Panic control treatment (PCT)*

One kind of integrative cognitive-behavioural treatment for panic disorders targets both agoraphobic avoidance and panic attacks. Several aspects of PCT are as follows:

- Clients are educated about the nature of anxiety and panic and how the capacity to experience both is adaptive.
- Teaching people with panic disorder to control their breathing.
- clients are taught about the logical errors that people who have panic disorders are prone to making and learn to subject their own automatic thoughts to a logical reanalysis.
- they are exposed to feared situations and feared bodily sensations to build up a tolerance to the discomfort.

# Continued-----

- **Medications**

Anxiolytics (antianxiety medications) from the benzodiazepine category such as alprazolam (Xanax) or clonazepam (Klonopin).

Advantage - act very quickly (30–60 minutes) and so can be useful in acute situations of intense panic or anxiety.

Undesirable side effects - drowsiness and sedation, which can lead to impaired cognitive and motor performance.

Prolonged use - most people using moderate to high doses develop physiological dependence on the drug, which results in withdrawal symptoms when the drug is discontinued.