


UNIT XII Abnormal Behavior

MODULES

- 0-5 Introduction to Psychological Disorders
- 0-6 Anxiety Disorders, Obsessive-Compulsive Disorder, and Posttraumatic Stress Disorder
- 0-7 Depressive Disorders, Bipolar Disorder, Schizophrenia, and Personality Disorders
- 0-8 Schizophrenia
- 0-9 Other Disorders



TRY IT

Anxiety or anxiety disorder?

Have you felt anxiety?

What events, people, situations, etc., cause you to feel anxious?

What do you think makes anxiety different from an anxiety disorder?

Talk about your thoughts with a classmate.

Learning Targets

Module 66

Anxiety Disorders, Obsessive Compulsive Disorder and Posttraumatic Stress Disorder

- 66-1 Contrast *generalized anxiety disorder*, *panic disorder*, and *phobias*.
- 66-2 Describe *obsessive-compulsive disorder (OCD)*.
- 66-3 Describe *posttraumatic stress disorder (PTSD)*.
- 66-4 Examine how conditioning, cognition, and biology contribute to the feelings and thoughts that mark *anxiety disorders*, *OCD*, and *PTSD*.

What is social anxiety disorder?

intense fear and avoidance of social situations (formerly called *social phobia*)

People with *social anxiety disorder* become extremely anxious in social settings where others might judge them, such as parties, class presentations, or even eating in public.

To stave off anxious thoughts and feelings (including physical symptoms such as sweating and trembling), they may avoid going out at all.

What are anxiety disorders?

psychological disorders characterized by distressing, persistent anxiety or maladaptive behaviors that reduce anxiety

Four anxiety disorders will be covered in this Module:

- Social anxiety disorder
- Generalized anxiety disorder
 - Panic disorder
- Phobia and agoraphobia

1. What Would You Answer?

Rebekah has grown increasingly nervous about going to school and social gatherings. When she is assigned a presentation in English class, she is so terrified that her teacher and classmates will judge her harshly that she can't bring herself to go to school at all. A therapist would be most likely to diagnose her with

- A. ADHD.
- B. panic disorder.
- C. obsessive-compulsive disorder.
- D. social anxiety disorder.
- E. posttraumatic stress disorder.


What is *generalized anxiety disorder*?

an anxiety disorder in which a person is continually tense, apprehensive, and in a state of autonomic nervous system arousal

Out-of-control, agitated feelings suggest ***generalized anxiety disorder***, which is marked by excessive and uncontrollable worry that persists for six months or more. People with this condition (2/3 are women) worry continually, and they are often jittery, agitated, and sleep-deprived. (McLean & Anderson, 2009)

What does a panic attack feel like?

Golfer Charlie Beljan experienced what he later learned were panic attacks during an important tournament. His thumping heartbeat and shortness of breath led him to think he was having a heart attack.



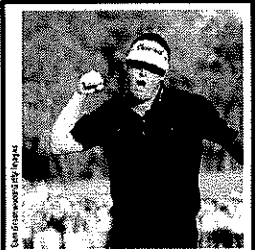
What are some characteristics of *generalized anxiety disorder*?

The person usually cannot identify, and therefore relieve or avoid, the tension's cause. To use Sigmund Freud's term, the anxiety is *free-floating* (not linked to a specific stressor or threat). Generalized anxiety disorder is often accompanied by depressed mood, but even without depression it tends to be disabling. (Hunt et al., 2004; Moffitt et al., 2007)

Moreover, it may lead to physical problems, such as high blood pressure, sleep disturbances and other issues.

overcoming panic

Hospital tests revealed that Beljan's symptoms were not related to a physical illness. He recovered, went on to win \$846,000, and has become an inspiration to others.



What is *panic disorder*?

an anxiety disorder marked by unpredictable, minutes-long episodes of intense dread – panic attacks- in which a person may experience terror and accompanying chest pain, choking, or other frightening sensations; often followed by worry over a possible next attack

For the 3% of people with ***panic disorder***, panic attacks are recurrent. These anxiety tornados strike suddenly, wreak havoc, and disappear, but are not forgotten.


How can panic attacks lead to *agoraphobia*?

After several panic attacks, people may avoid situations where panic might strike. If their fear is intense enough, people may develop ***agoraphobia***—fear or avoidance of public situations from which escape might be difficult.

Given such fear, people may avoid being outside the home, in a crowd, or in an elevator.

What is a *phobia*?


an anxiety disorder marked by a persistent, irrational fear and avoidance of a specific object, activity, or situation



Walter D. Rife/Getty Images

TRY IT

Interpreting graphs.



How common are the various specific phobias? Are more people afraid of enclosed spaces or phobic of water?

TRY IT

What are you afraid of?

Think of the fears you have. Talk them over with your class.
What differentiates a fear from a phobia?

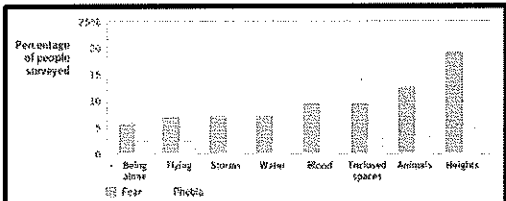
Discuss your thoughts.

2. What Would You Answer?

Andrew is so afraid of spiders that he is having a hard time leaving his "spider-proofed" home and going to work. Andrew's psychiatrist has diagnosed him with

- A. agoraphobia.
- B. a phobia.
- C. panic disorder.
- D. generalized anxiety disorder.
- E. posttraumatic stress disorder.

What are specific phobias?



Specific phobias may focus on animals, insects, heights, blood, or close spaces.

What is *obsessive-compulsive disorder (OCD)*?

a disorder characterized by unwanted repetitive thoughts (obsessions), actions (compulsions), or both

Obsessive thoughts are unwanted and so repetitive it may seem they will never go away.

Compulsive behaviors are often responses to those thoughts.

What are some common obsessions and compulsions among those with *OCD*?

Thought or Behavior	Percentage Reporting Symptom
Obsessive or intrusive thoughts	
Concern with dirt, germs, or toxins	40
Sexual or violent thoughts (fire, death, illness)	24
Order, symmetry, or exactness	17
Compulsions, rituals, or fears	
Excessive hand washing, sanitizing, or cleaning	55
Repeating rituals (e.g., of a USA, question from a crowd)	54
Checking doors, locks, appliances, car engines, possessions	46

Data from Rasmussen, 1999.

Rituals and fussy behaviors cross the fine line between normality and disorder when they *persistently interfere* with everyday living and cause distress.

What other disorders are classified as *OCD*-related disorders in the *DSM-5*?

hoarding disorder (cluttering one's space with acquired possessions one can't let go)

body dysmorphic disorder (preoccupation with perceived body defects)

trichotillomania (hair-pulling)

excoriation disorder (excessive skin-picking)

What is the difference between a normal behavior and one suggesting *OCD*?

normal	sign of disorder
Checking that you locked the door is normal.	Checking 10 times that you locked the door is not.
Washing your hands thoroughly is normal.	Washing your hands so often that your skin becomes raw is not.
Organizing your markers and pens in rainbow order is normal.	Not being able to use a pen unless it is in rainbow order is not.



What is *posttraumatic stress disorder (PTSD)*?

a disorder characterized by haunting memories, nightmares, hypervigilance, social withdrawal, jumpy anxiety, numbness of feeling, and/or insomnia that lingers for four weeks or more after a traumatic experience

Typical symptoms include recurring haunting memories and nightmares, laser-focused attention to possible threats, social withdrawal, jumpy anxiety, and trouble sleeping.

(Germain, 2013; Hoge et al., 2007; Yuval et al., 2017)

Thriving with *OCD*.

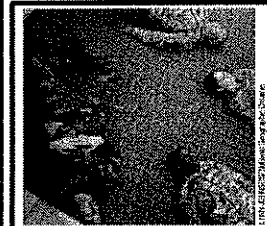
Music star Justin Timberlake has openly discussed his ***obsessive-compulsive disorder***.

He says that support from family and a rich sense of humor have helped him cope with the challenges.



What treatment exists for *PTSD*?

Many military war veterans participate in an intensive recovery program using deep breathing, massage, and group and individual discussion techniques to treat their *PTSD*.



Why do some develop PTSD after a traumatic event?

About half of us will experience at least one traumatic event in our lifetime, yet 5 to 10% of people develop PTSD after a traumatic event and others don't.
(Bonanno *et al.*, 2011)

One factor that might explain why some develop PTSD and others do not might be the amount of trauma-related emotional distress. The higher the distress, such as the level of physical torture suffered by prisoners of war, the greater the risk for posttraumatic symptoms.
(King *et al.*, 2015; Ozer *et al.*, 2003)

What is stimulus generalization?

Remember from Module 26 that in classical conditioning, stimulus generalization is the tendency, once a response has been conditioned, for stimuli similar to the conditioned stimulus to elicit similar responses.

In operant conditioning, stimulus generalization occurs when responses learned in one situation occur in other, similar situations.

What additional factors impact the development of PTSD in some people?

Some people may have a more sensitive emotion-processing limbic system that floods their bodies with stress hormones, which explains why PTSD may coexist with another disorder.
(Duncan *et al.*, 2017; Kosslyn, 2005; Ozer & Weiss, 2004)

Twins, compared with non-twin siblings, more commonly share PTSD cognitive risk factors.
(Gilbertson *et al.*, 2006)

And the odds of experiencing PTSD after a traumatic event are about two times higher for women than for men. (Olf *et al.*, 2007; Ozer & Weiss, 2004)

How does stimulus generalization explain anxiety, OCD and PTSD?

Stimulus generalization occurs when a person experiences a fearful event and later develops a fear of similar events.

If a child is bit by a dog, the fear associated with that bite may develop into a fear of all dogs.

How does conditioning impact anxiety disorders, OCD, and PTSD?

Anxious or traumatized people learn to associate their anxiety with certain cues.
(Bar-Haim *et al.*, 2007; Duits *et al.*, 2015)

58% of those with social anxiety disorder developed the disorder following a traumatic event.
(Ost & Hugdahl, 1981)


Anxiety or an anxiety-related disorder is more likely to develop when bad events happen unpredictably and uncontrollably.
(Field, 2006; Mineka & Oehlberg, 2008)

What is reinforcement and how does it help explain anxiety, OCD and PTSD?

Recall from Module 27, in operant conditioning, reinforcement is any event that *strengthens* the behavior it follows.

Reinforcement helps maintain learned fears and anxieties. Anything that enables us to avoid or escape a feared situation can reinforce maladaptive behaviors. Fearing a panic attack, we may decide not to leave the house. Reinforced by feeling calmer, we are likely to repeat that behavior in the future.
(Antony *et al.*, 1992)

If washing our hands relieves our feelings of anxiety, we may wash our hands again when those feelings return.

 **How does cognition impact anxiety?**

Cognition, our thoughts, memories, interpretations, and expectations, influences our feelings of anxiety.

Our past experiences shape our expectations and influence our interpretations and reactions.

Whether we interpret the creaky sound simply as the wind or as a possible knife-wielding attacker determines whether we panic.

How do genes regulate neurotransmitters that impact anxiety, OCD and PTSD?

Some genes influence disorders by regulating brain levels of neurotransmitters.

These include *serotonin*, which influences sleep, mood, and attending to threats.
(Canli, 2008; Pergamin-Hight et al., 2012)


Genes also regulate the levels of *glutamate*, which heightens activity in the brain's alarm centers.
(Lafleur et al., 2006; Welch et al., 2007)

What research has been conducted on cognition and anxiety?

Susan Mineka experimented with six monkeys raised in the wild (all strongly fearful of snakes) and their lab-raised offspring (virtually none of which feared snakes).

After repeatedly observing their parents or peers refusing to reach for food in the presence of a snake, the younger monkeys developed a similar strong fear of snakes.


When the monkeys were retested three months later, their learned fear persisted.
(Mineka, 1985, 2002)

 **How do our experiences change our brain?**

Our experiences change our brain, paving new pathways.

Traumatic fear-learning experiences can leave tracks in the brain, creating fear circuits within the amygdala
(Etkin & Wager, 2007; Herringa et al., 2013; Kolassa & Elbert, 2007)

These fear pathways create easy inroads for more fear experiences.
(Armony et al., 1998)

 **How do genes impact anxiety, OCD and PTSD?**

One research team identified 17 gene variations associated with typical **anxiety disorder** symptoms.
(Hovatta et al., 2005)

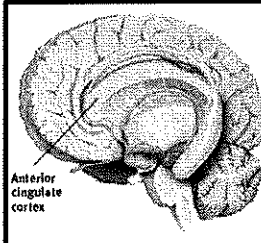
Other teams have found genes associated specifically with **OCD**.
(Mattheisen et al., 2015; Taylor, 2013)

If one identical twin has an **anxiety disorder**, the other is also at risk.
(Polderman et al., 2015)

Even when raised separately, identical twins may develop similar **phobias**.
(Carey, 1990; Eckert et al., 1981)

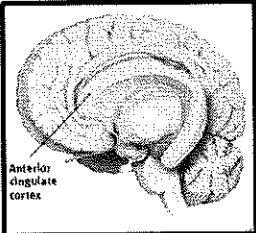
How are brain structures involved?

Brain scans of people with OCD reveal elevated activity in the anterior cingulate cortex during behaviors such as compulsive hand washing, checking, ordering, or hoarding.
(Insel, 2010; Mataix-Cols et al., 2004, 2005)



What role does the anterior cingulate cortex play in *OCD*?

The *anterior cingulate cortex*, a brain region that monitors our actions and checks for errors, seems especially likely to be hyperactive. (Maltby et al., 2005)



Anterior cingulate cortex


Learning Target 66-1 Review

Contrast *generalized anxiety disorder*, *panic disorder*, and *phobias*.

- Anxious feelings and behaviors are classified as an *anxiety disorder* when they form a pattern of distressing, persistent anxiety or maladaptive behaviors that reduce anxiety.
- People with *generalized anxiety disorder* feel persistently and uncontrollably tense and apprehensive for no apparent reason.

How does biology drive fears?

The biological perspective helps us understand why most people have more fear of heights than does Alex Honnold, shown at right in 2017 becoming the first person to free solo climb (no safety ropes) Yosemite National Park's El Capitan granite wall.



Learning Target 66-1 Review cont.

Contrast *generalized anxiety disorder*, *panic disorder*, and *phobias*.

- In the more extreme *panic disorder*, anxiety escalates into periodic episodes of intense dread.
- Those with a *phobia* may be irrationally afraid of a specific object, activity, or situation.

How does natural selection underlie our fears?

We seem biologically prepared to fear threats faced by our ancestors.

Our phobias focus on specific fears such as spiders, snakes, and other animals; enclosed spaces and heights; storms and darkness.

Those fearless about these occasional threats were less likely to survive and leave descendants.

Even in Britain, with only one poisonous snake species, people often fear snakes.

Learning Target 66-2 Review

Describe *obsessive-compulsive disorder (OCD)*.

- Persistent and repetitive thoughts (obsessions) and behaviors (compulsions) characterize *obsessive-compulsive disorder (OCD)*.

Learning Target 66-3 Review



Describe **posttraumatic stress disorder (PTSD)**.

- Symptoms of **posttraumatic stress disorder (PTSD)** include haunting memories, nightmares, social withdrawal, jumpy anxiety, and sleep problems following some traumatic experience.

Learning Target 66-4 Review part III



Examine how biology contributes to the feelings and thoughts that mark **anxiety disorders, OCD, and PTSD**.

- Our biology also plays a role. Genetic predispositions for high levels of emotional reactivity and neurotransmitter production make us vulnerable to disorder, as do epigenetic marks.
- Abnormal responses in the brain's fear circuits can create inroads for disorder. Natural selection and evolution have prepared us to fear the threats our ancestors faced.

Learning Target 66-4 Review



Examine how conditioning contributes to the feelings and thoughts that mark **anxiety disorders, OCD, and PTSD**.

- Through conditioning, anxious or traumatized people may learn to associate their anxiety with certain cues.
- **Stimulus generalization** occurs when someone experiences a fearful event and later develops a fear of similar events.
- **Reinforcement** helps maintain learned fears and anxieties.

Learning Target 66-4 Review part II



Examine how cognition contributes to the feelings and thoughts that mark **anxiety disorders, OCD, and PTSD**.

- Cognition can influence our expectations and our interpretation of and reaction to stimuli.
- We may learn some fears by observing others' fears.
- People with anxiety disorders tend to be hypervigilant and attend more to threatening stimuli, more often interpret ambiguous stimuli as threatening, and remember threatening events.