Phobia

An excessive, unrealistic fear of a specific object, situation, or activity that causes a person to avoid that object, situation, or activity.

Unlike generalized anxiety, phobias involve specific, identifiable but usually irrational fears. Phobias are common occurrences among a large segment of the population. People with phobias recognize that their fears are irrational, yet avoid the source to spare themselves of the resulting anxiety. Phobias are classified as disorders only when they interfere substantially with a person’s daily life.

Psychologists have identified three categories of phobic disorders. The first, simple phobia, is defined in Diagnostic and Statistical Manual of Mental Disorders as a persistent, irrational fear of, and compelling desire to avoid, an object or a situation other than being alone, or in public places away from home (agoraphobia) or of humiliation or embarrassment in certain social situations (social phobia). Simple phobia causes considerable distress when confronted because the person realizes that the fear is excessive and irrational. Such phobias are not indicative of other mental disorders. Almost any object or situation can be the cause of a simple phobia. Common phobias include fear of snakes (ophidiophobia), enclosed places (claustrophobia), and spiders (arachnophobia). Fear of heights, doctors and dentists, loud noises, storms, and the sight of blood also are experienced by large numbers of people. Animal phobias, the most common type of simple phobia, usually develop in early childhood. Most people do not seek treatment for simple phobias; they simply avoid the object or situation.

The second category of phobic disorders are social phobias. People with social phobias avoid social situations because they are afraid of embarrassing themselves. Fear of public speaking, fear of using public toilets, and fear of eating in public are common social phobias. Most social phobias develop over a period of time, beginning in adolescence or the early 20s, and rarely over the age of 30.

Agoraphobia, the third category of phobic disorders, is the most disabling and the most difficult to treat. Agoraphobia can be defined as the fear of being alone, or the fear of being in public places in unfamiliar settings. Some agoraphobics fear open spaces, like large bodies of water or open fields without fences. Most agoraphobics fear more than one situation, which contributes to the disabling nature of the disorder. The list of fears is long and extensive: public transportation, bridges, tunnels, crowded theaters, or simply being home alone. Agoraphobia rarely begins before age 18 or after 35. Sometimes it appears to be precipitated by major illness or stress.

Like other anxiety disorders, phobias can be treated with drugs, behavior therapy or both. Drug therapy usually includes minor tranquilizers like Librium or Valium, taken before a situation in which a phobia is likely to be introduced. Behavior therapy attempts to reduce a patient’s anxiety through exposure to the phobia. For example, patients are guided step-by-step from imaginary confrontation of the phobia (visualizing a snake, for example) to actually experiencing it (holding a real snake). Gradual desensitization is most successful in treating simple phobias.

Further Reading


Phrenology

An approach, primarily of historical interest, to describing the thinking process based on the belief that different mental capacities are controlled by specific locations in the brain.

Although people recognize the brain as the center of mental processes, this contemporary view has not always been accepted. Philosophers and scientists have proposed different ideas throughout history about the process of thinking that have since been rejected as inaccurate. One such rejected approach was phrenology. Phrenologists believed that our different mental capacities were controlled by specific locations in the brain. Although scientists today recognize the general validity of this belief, the problem was that the phrenologists developed ideas that did not really describe the way the brain functions.

German scientist Franz Joseph Gall (1758-1828), a recognized expert on anatomy, proposed the initial ideas on phrenology. He proposed that some areas of the brain...
were highly developed in certain individuals, which lead to specific behaviors. For instance, he claimed that pickpockets were acquisitive (i.e., possessed the desire to own things) because of excess development of an area on the side of the head. One of Gall’s contemporaries, Johann Spurzheim (1776-1832) identified 35 different mental faculties and suggested the location in the brain that related to each one. Each trait was claimed to lead to a certain behavior; the inclination toward that behavior could be detected by assessing the bumps on a person’s skull. Scientists now recognize that the shape of the skull does not relate to the shape of the brain.

From the start, phrenology was controversial. For instance, the Roman Catholic church pressured the Austrian government to prevent Gall from lecturing in an area that the Church regarded as materialistic and atheistic. This tactic apparently served to increase the interest in phrenology. Although Gall developed his ideas with a serious scientific perspective, Spurzheim was more of an entrepreneur. He coined the term phrenology (which Gall never accepted), popularized it, and brought it to the United States. Spurzheim’s goal was to reform education, religion, and penology using principles of phrenology. He died shortly after arriving in America, however. Spurzheim’s work was continued by the British phrenologist George Combe (1788-1858), whose book on phrenology, Constitution of Man, was quite popular. According to psychology historian David Hothersall, Combe was highly respected by scientists in the United States. He was elected to the National Academy of Sciences. Interestingly, at one point he was asked to justify slavery on the grounds that people of African descent had “inferior” skulls. Combe refused, noting that educated slaves were the intellectual equals of white people. Similarly, Combe rejected the second-class status of women, asserting that they were not intellectually or emotionally inferior to men.

Two enterprising brothers, Orson and Lorenzo Fowler, marketed phrenology as a means by which people could improve themselves. Unlike Gall, who believed that heredity dictated one’s strengths and weaknesses, the Fowlers preached the environmental message that people could improve themselves by practice and could overcome weaknesses by virtue of their will. They wrote extensively for popular audiences and published a journal of phrenology that existed from the 1840s to 1911. They also set up a clinic in New York where clients could be tested; they toured the United States, giving advice wherever they went; and they emphasized the practical vision of phrenology, minimizing the scientific aspects of their field.

Meanwhile, scientists and philosophers quickly dismissed phrenological ideas. Leading biologists and physicians of the day showed that the specific locations deemed important by the phrenologists were not associated with specific mental processes. Similarly, careful research in the area revealed that phrenologists were susceptible to biased observations in cases in which the research supported phrenological claims. During the 19th century, at the height of phrenology’s popularity among the general public, scientists regarded the field with disdain and characterized it as a discipline dressed up to look like science. Nonetheless, phrenology exerted a positive influence on the fields of physiology and, later, biology, and sparked research on the relationship between the brain and behavior.

Further Reading

**Physiological psychology**

The area of experimental psychology concerned specifically with how biology shapes behavior and mental processes.

The area of experimental known as physiological psychology has evolved in the 1990s. Increasingly, the field is being referred to as behavioral neuroscience, replacing physiological psychology and biological psychology. Nonetheless, the goals of psychologists in this field remain the same: to utilize basic research to explain behavior in physiological terms, working on the assump-