

# CHAPTER 10: MOTIVATION AND EMOTION

## IF YOU LEARN ONLY FOUR THINGS IN THIS CHAPTER . . .

1. Human motivation is complex, and while there are a number of theories, none by itself sufficiently explains our behavior.
2. Biological motivation includes the role of the hypothalamus, which maintains a state called homeostasis.
3. Theories of social motivation, including the need for achievement and the hierarchy of needs, show the importance of understanding motivation in the context of our environments.
4. Emotions can be explained through a variety of theoretical perspectives, each arguing that emotion emerges in conjunction with physiological response to stimuli.

## INTRODUCTION

Everyone knows what motivation is: It is the drive to begin or maintain behavior. Students are keenly aware that being motivated to do something can have great significance. Preparing for the AP Psychology exam, for instance, is something that is better done early in the year and with great frequency.

For most of us, however, it is not easy to become motivated when the consequences of our behavior are distal rather than proximal. If we think we have time to do something, we will use up as much time as possible before we start doing it.

Humans have long been interested in trying to determine ways to improve motivation. But since we don't completely understand the process, it is difficult to manipulate.

First we will review theories of motivation, and then look at the biological and social aspects of motivation.

## THEORIES OF MOTIVATION

One of the oldest theories of motivation is that of **instincts**, which comes from the field that we know today as **evolutionary psychology**. Following the ideas of Charles Darwin, this theory suggests that human behavior is driven by innate instinctual drives like those of other animals, such as the nest-building and spawning behaviors that are inherited tendencies for some birds and fish. However, this theory soon revealed its limitations in that it could only describe the behavior of humans but not provide an explanation.

Another theory, which comes from the work of Clark Hull in the 1940s, suggested that human behavior could be explained by what he called **drive-reduction theory**. Hull stated that humans have innate biological needs (for example, thirst) and social needs (for example, love), and that drives compel us to satisfy our needs. A person who realizes she is thirsty (a need) then feels an internal motivation (the drive) to find water to satisfy that need.

Incentive theory offers a counter to drive-reduction theory, in that we are not pushed internally by needs but are pulled from the outside by external **incentives**. For example, if we walk by a bakery, the aroma of bread or the sight of freshly baked loaves may entice us inside whether or not we are hungry.

Finally, we may also be driven by intrinsic and extrinsic motivation. A boy who plays the violin for four hours a day simply to excel is driven by **intrinsic motivation**, but if those practice sessions are motivated by external rewards such as winning a competition or gaining admiration from his parents, then this is **extrinsic motivation**.

## BIOLOGICAL MOTIVATION

The **hypothalamus** is the region of the brain most often associated with motivation. It plays an important role in the motivation for **feeding, fighting, fleeing, and sexual reproduction**. Research has shown, for instance, that if we lesion the **lateral hypothalamus** in a rat, the rat will lose its appetite. The rat will experience a form of anorexia in which it will not be hungry and, therefore, will not eat. Thus, we believe that the lateral hypothalamus provides motivation for hunger or feeding.

We also know that the **ventromedial hypothalamus** is important in eating behavior. The ventromedial hypothalamus seems to be the satiety center (the part of the brain that tells you that you're full). If we lesion the ventromedial hypothalamus, the rat will not feel full and will continue to eat well beyond what is normally expected. Thus, we can clearly see the motivation in the biological structure of the brain for this behavior.

One of the most important concepts in biological motivation is that of **homeostasis**, the tendency of all organisms to maintain a balanced state. When we are too cold, the hypothalamus releases hormones that cause us to shiver and seek out warmth or put on clothing. When we have not had enough sleep, we are likewise pushed to slow down as we yawn and struggle to keep our eyes open. Homeostasis helps us to return to this balance when we deviate from our normal state.

## SOCIAL MOTIVATION

In the 1950s, psychologist David McClelland explored what motivated humans to challenge themselves, particularly in relation to others. He developed a theory called **need for achievement** in which he used experimental data based on participants' descriptions of ambiguous pictures to support his claims. In longitudinal studies, McClelland found that subjects who scored high on tests of achievement were more likely to be entrepreneurs. Other theories of social motivation claim that fear can be a very powerful motivator, with some humans being driven by a fear of failure while others are more afraid of success.

One way that we can provide motivation for ourselves is to delay gratification by holding off on a reward until after we perform some less desirable activity. This is called the Premack principle, and it can be applied in many social situations. It is a form of social reinforcement that has been shown to be very effective.

## MASLOW'S HIERARCHY OF NEEDS

Abraham Maslow argued that humans were driven not by a need for achievement but by a need to become **self-actualized**, which means to reach one's own unique potential. Maslow's **hierarchy of needs** theory suggests, however, that before individuals can concern themselves with self-actualization they must first take care of more basic fundamental needs (such as hunger and thirst) and psychological needs (such as love and self-esteem).

## EMOTIONS

A concept related to motivation is that of emotions. Psychologists have long asked what causes emotions and even what are emotions. We know that there is consistency among cultures in terms

of how we express emotions facially. For example, research has shown that fear is identifiable in faces regardless of culture. What we do not know, however, is how emotions are generated. There are several debated theories about emotion. They are summarized as follows:

<b>James–Lange theory</b>	We have a physiological response and we label it as an emotion: “I see a bear, my muscles tense, I feel afraid.”
<b>Cannon–Bard theory</b>	We have an emotional response and we feel the physiological response: “I see a bear, I feel afraid, my muscles tense.”
<b>Schacter–Singer theory</b>	We experience feelings and then label them: “I feel bad. I must be scared.”
<b>Cognitive appraisal</b>	When there is no physiological arousal, we experience something, we think about it, we label it as an emotion.

As you can see, emotions are difficult to understand. We assume they are physiological at some level, but there is often a cognitive component. However, unlike other cognitions, emotions are not directly under our control (jealousy, for example). So we are left with an experience that is very common but difficult to explain—just like much of psychology.

YOU KNOW YOU HAVE MASTERED THE MAIN TOPICS IN THIS CHAPTER IF YOU ARE ABLE TO . . .

- Define stress and identify the external and psychological factors that influence an individual's experience of stress.
- Discuss the causes of stress.
- Describe the physical reaction to stress and the relation of this reaction to cognitive, personality, and social factors.
- Explain the methods used to cope with stress including those influenced by culture and religion.

### RAPID REVIEW

**Stress** is the physical, emotional, cognitive, and behavioral responses to events that are perceived as threatening or challenging. When a person's stress response is unpleasant or undesirable it is called **distress**, and when it is an optimal amount that helps a person function it is called **eustress**. The events that cause stress are called **stressors** and can be either internal or external events. Stressors can include external events such as catastrophes, major life changes, and hassles, along with internal experiences such as pressure, uncontrollability, and frustration. A **catastrophe** is an unpredictable event that happens on a large scale such as a tornado or flood. The terrorist-driven destruction of the World Trade Center in New York City on September 11, 2001, is a prime example of a catastrophe, and nearly 8 percent of the people living in the area near the attacks developed a severe stress disorder. A number of researchers have suggested that any major life change, such as moving, getting married, or getting a new job, would result in stress. Holmes and Rahe developed the **Social Readjustment Rating Scale (SRRS)** to measure the amount of change and thus stress in a person's life. Researchers have found a moderate correlation between scores on the SRRS and physical health. A majority of the stressors that people have to deal with are the little daily annoyances, or **hassles**. Surveys that measure the number of hassles an individual has to deal with are actually a better predictor of short-term illnesses than the SRRS. The internal experience of **pressure** is also considered a stressor. Pressure is the psychological experience produced by demands and expectations from outside sources. Two additional internal causes of stress are **uncontrollability**, or a lack of control in a situation, and **frustration**, or being blocked from achieving a desired goal. Typical reactions to frustration include persistence and **aggression**, or actions meant to harm or destroy. **Displaced aggression** occurs when a person takes out his or her frustrations on less threatening, more available targets and is a form of displacement. Another possible reaction to frustration is **escape or withdrawal**. An extreme reaction to stress in the way of a final escape is suicide, or intentionally taking one's own life.

**Conflict** is another source of stress and occurs when a person feels pulled toward two or more goals but can only achieve one of them. **Approach–approach conflict** occurs when an individual is attempting to choose between two desirable goals. **Avoidance–avoidance conflict** occurs when someone must choose between two undesirable goals. **Approach–avoidance conflict** describes a single goal that has both desirable and undesirable outcomes. An individual faced with two options in which each option has positive and negative aspects is dealing with a **double approach–avoidance conflict**. If there are more than two options, the conflict is called a **multiple approach–avoidance conflict**.

Endocrinologist **Hans Selye** was a pioneer in the study of the physical consequences of exposure to stressors. He proposed that the body goes through a sequence of three stages he called the **general adaptation syndrome (GAS)**. The initial stage is called **alarm** and represents the immediate reaction to stress mediated by our **sympathetic nervous system**. Typical alarm reactions include increased heart rate and blood pressure and release of sugar into the blood stream. As the stress continues, the body enters the **resistance** stage, during which time the sympathetic nervous system works overtime to give the body more energy. When the body's resources have been exhausted, the **parasympathetic nervous system** is activated and the body enters the **exhaustion** stage. Selye believed that it was the prolonged release of stress hormones during the resistance stage that led to the breakdown of the body's **immune system** and

the onset of the stress-related physical conditions. Researchers in the field of **psychoneuroimmunology** who study the effects of psychological factors on the immune system have found that stress actually causes an increase in the activity of the immune system. High levels of stress have been linked to increased risk of heart disease. Also, stress has been shown to decrease the amount of **natural killer cells**, which are the cells responsible for fighting cancerous growths. **Health psychology** is a new area of psychology focusing on how physical activities, psychological traits, and social relationships affect overall health.

The **cognitive–mediational theory** of emotions proposed by Richard Lazarus states that the way people think about and appraise a stressor is a major factor in their stress response. The first step in appraising a stressor is called **primary appraisal** and involves estimating the severity of the stressor and classifying it as a threat, challenge, or loss. In **secondary appraisal**, an individual determines what resources he or she has available for dealing with the threat or loss. Personality has also been linked to stress-related health risks. In 1974, Meyer Freidman and Ray Rosenman published a book describing the **Type A** and **Type B personalities** and their link to heart disease. Based on studies of their own patients, Freidman and Rosenman proposed that individuals with Type A personality (a person who is competitive, ambitious, workaholic, with a constant sense of pressure) were more likely to develop heart disease than someone with a Type B personality. Several studies found that the specific trait of hostility in Type A individuals was the best predictor of future heart problems. A third personality type called **Type C** (in which a person holds in their emotions and tends to be pleasant) was later identified and is currently being investigated as to its possible link with cancer rates. Finally, research has suggested a fourth personality type, the **hardy personality**, which is associated with decreased illness due to stress. An individual with a hardy personality shows commitment, displays a sense of control, and sees stresses as challenges to be met and answered. In addition to personality, links have been found between an individual's attitude and his or her physical reactions to stress. Specifically, **pessimists** have been found to have significantly more stress-related health problems than **optimists**. One way to become an optimist is to recognize any negative thoughts you are having and work to get rid of them.

Social factors also play a key role in the amount of stress an individual experiences. Living in poverty and job stress are two major sources of stress. A serious consequence of job stress is **burnout**, or negative changes in thoughts, emotions, and behaviors as a result of prolonged stress or frustration. **Acculturative stress** describes the stress an individual experiences when having to adapt to a new culture. The method of adaptation can affect the stress level. Some of the methods of adapting to a new culture include integration, assimilation, separation, and marginalization. The effects of negative social factors on health can be minimized by a strong **social support system**, or network of family and friends who can offer help when a person is in need.

**Coping strategies** are actions that people take to master, tolerate, reduce, or minimize the effects of stressors and include both behavioral and psychological strategies. **Problem-focused coping** occurs when a person tries to eliminate the source of stress or reduce its impact by taking some action, while **emotion-focused coping** involves changing the way you feel or react to a stressor. **Meditation** is a series of mental exercises meant to refocus attention. **Concentrative meditation**, the form of meditation best known to the general public, has been found to be an effective coping strategy. Culture and religion have also been found to affect an individual's level of stress as well as the strategies used to cope with that stress.

Martin Seligman and others have shown that optimistic thinking is a good thing. The way to become an optimist is to monitor one's own thinking. Recognition of negative thoughts is the first step, followed by disputing those same negative thoughts.

## STUDY HINTS

1. One important component to understanding this chapter is to understand the difference between a stressor and stress. The stressor is the event that causes us to experience stress. The event can be external, such as getting stuck in traffic, or internal, such as worrying about an upcoming exam. Our reaction to the event is called stress and can be physical, emotional, mental, and behavioral. Try coming up with some examples of events that could be considered stressors along with possible stress reactions. The first example has already been completed for you.