

- Motivational Concepts
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Basic Motivational Concepts and Hunger

Motivational Concepts

32-1 How do psychologists define *motivation*? From what perspectives do they view motivated behavior?

Psychologists today define **motivation** as a need or desire that energizes and directs behavior. In their attempt to understand motivated behaviors, psychologists have used four perspectives. *Instinct theory* (now replaced by the *evolutionary perspective*) focuses on genetically predisposed behaviors. *Drive-reduction theory* focuses on how our inner pushes and external pulls interact. *Arousal theory* focuses on finding the right level of stimulation. And Abraham Maslow's *hierarchy of needs* describes how some of our needs take priority over others.

Instincts and Evolutionary Psychology

Early in the twentieth century, as the influence of Charles Darwin's evolutionary theory grew, it became fashionable to classify all sorts of behaviors as instincts. If people criticized themselves, it was because of their "self-abasement instinct." If they boasted, it reflected their "self-assertion instinct." After scanning 500 books, one sociologist compiled a list of 5759 supposed human instincts! Before long, this fad for naming instincts collapsed under its own weight. Rather than *explaining* human behaviors, the early instinct theorists were simply *naming* them. It was like "explaining" a bright child's low grades by labeling the child an "underachiever." To name a behavior is *not* to explain it.

To qualify as an **instinct**, a complex behavior must have a fixed pattern throughout a species and be unlearned (Tinbergen, 1951). Such behaviors are common in other species. Newly hatched ducks and geese form attachments to the first moving object they see. And mature salmon swim hundreds of miles upstream to reach the place where they were born, where they will mate and then die. Human behavior, too, exhibits certain unlearned fixed patterns, including infants' innate reflexes for rooting and sucking. Most psychologists, though, view human behavior as directed both by physiological needs and by psychological wants.

Although instinct theory failed to explain most human motives, the underlying assumption that genes predispose species-typical behavior remains as strong as ever. Psychologists may apply this perspective, for example, in explanations of our human similarities, animals' biological predispositions to learn certain behaviors, and the influence of evolution on our phobias, our helping behaviors, and our romantic attractions.



James Warwick/Science Source



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Same motive, different wiring The more complex the nervous system, the more adaptable the organism. Both humans and weaverbirds satisfy their need for shelter in ways that reflect their inherited capacities. Human behavior is flexible; we can learn whatever skills we need to build a house. The bird's behavior pattern is fixed; it can build only this kind of nest.

motivation a need or desire that energizes and directs behavior.

instinct a complex behavior that is rigidly patterned throughout a species and is unlearned.

"What do you think . . . should we get started on that motivation research or not?"

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Drives and Incentives

When the original instinct theory of motivation collapsed, it was replaced by **drive-reduction theory**—the idea that a physiological need creates an aroused state that drives the organism to reduce the need by, say, eating or drinking. With few exceptions, when a physiological need increases, so does a psychological *drive*—an aroused, motivated state.

The physiological aim of drive reduction is **homeostasis**—the maintenance of a steady internal state. An example of homeostasis (literally "staying the same") is the body's temperature-regulation system, which works like a room thermostat. Both systems operate through feedback loops: Sensors feed room temperature to a control device. If the room temperature cools, the control device switches on the furnace. Likewise, if our body temperature cools, blood vessels constrict to conserve warmth, and we feel driven to put on more clothes or seek a warmer environment (FIGURE 32.1).

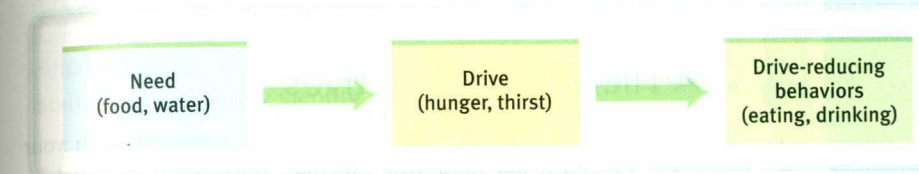


FIGURE 32.1

Drive-reduction theory Drive-reduction motivation arises from *homeostasis*—an organism's natural tendency to maintain a steady internal state. Thus, if we are water deprived, our thirst drives us to drink and to restore the body's normal state.

Not only are we *pushed* by our need to reduce drives, we also are *pulled* by **incentives**—positive or negative environmental stimuli that lure or repel us. This is one way our individual learning histories influence our motives. Depending on our learning, the aroma of good food, whether fresh roasted peanuts or toasted ants, can motivate our behavior. So can the sight of those we find attractive or threatening.

When there is both a need and an incentive, we feel strongly driven. The food-deprived person who smells baking bread feels a strong hunger drive. In the presence of that drive, the baking bread becomes a compelling incentive. For each motive, we can therefore ask, "How is it pushed by our inborn physiological needs and pulled by incentives in the environment?"

Optimum Arousal

We are much more than homeostatic systems, however. Some motivated behaviors actually *increase* arousal. Well-fed animals will leave their shelter to explore and gain information, seemingly in the absence of any need-based drive. Curiosity drives monkeys to monkey around trying to figure out how to unlock a latch that opens nothing or how to open a window that allows them to see outside their room (Butler, 1954). It drives the 9-month-old infant to investigate every accessible corner of the house. It drives the scientists whose work



Harlow Primate Laboratory, University of Wisconsin



Clem Swier

Driven by curiosity Baby monkeys and young children are fascinated by things they've never handled before. Their drive to explore the relatively unfamiliar is one of several motives that do not fill any immediate physiological need.



Motivation personified Aron Ralston's motivation to live and belong energized and directed his sacrificing half of his arm.



Getty Images

this text discusses. And it drives explorers and adventurers such as Aron Ralston and George Mallory. Asked why he wanted to climb Mount Everest, Mallory answered, "Because it is there." Those who, like Mallory and Ralston, enjoy high arousal are most likely to seek out intense music, novel foods, and risky behaviors (Zuckerman, 1979). They are "sensation-seekers."

So, human motivation aims not to eliminate arousal but to seek optimum levels of arousal. Having all our biological needs satisfied, we feel driven to experience stimulation and we hunger for information. We are "infovores," said neuroscientists Irving Biederman and Edward Vessel (2006), after identifying brain mechanisms that reward us for acquiring information. Lacking stimulation, we feel bored and look for a way to increase arousal to some optimum level. However, with too much stimulation comes stress, and we then look for a way to decrease arousal.

■ A Hierarchy of Motives

Some needs take priority over others. At this moment, with your needs for air and water hopefully satisfied, other motives—such as your desire to achieve—are energizing and directing your behavior. Let your need for water go unsatisfied and your thirst will preoccupy you. Just ask Aron Ralston. Deprived of air, your thirst would disappear.

Abraham Maslow (1970) described these priorities as a **hierarchy of needs** (FIGURE 32.2). At the base of this pyramid are our physiological needs, such as those for food and water. Only if these needs are met are we prompted to meet our need for safety, and then to satisfy the uniquely human needs to give and receive love and to enjoy self-esteem. Beyond this, said Maslow (1971), lies the need to actualize one's full potential.

"Hunger is the most urgent form of poverty."

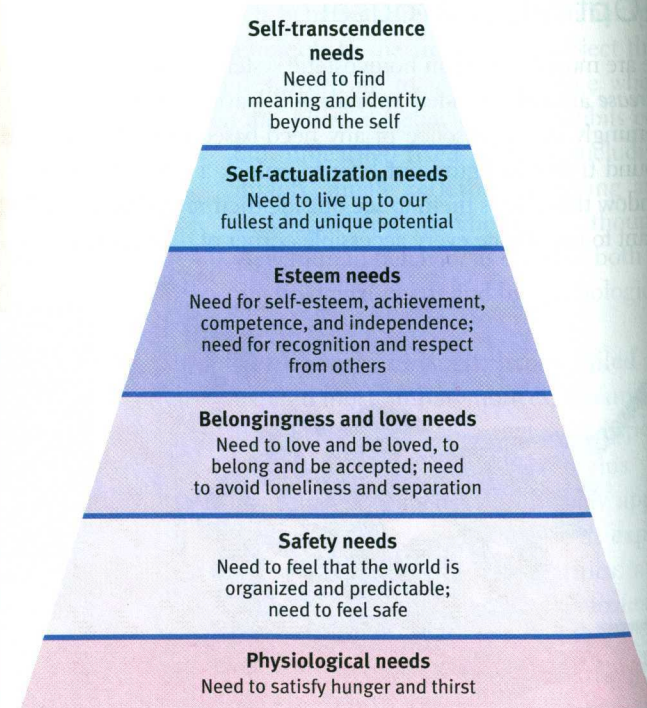
Alliance to End Hunger, 2002

FIGURE 32.2

Maslow's hierarchy of needs Once our lower-level needs are met, we are prompted to satisfy our higher-level needs. (From Maslow, 1970.) For survivors of the disastrous tornadoes that swept across the Midwest and Southeastern United States in 2011, satisfying very basic needs for water, food, and safety became top priority. Higher-level needs on Maslow's hierarchy, such as respect, self-actualization, and meaning, become far less important during such times.



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Near the end of his life, Maslow proposed that some people also reach a level of self-transcendence. At the self-actualization level, people seek to realize their own potential. At the *self-transcendence* level, people strive for meaning, purpose, and communion that is beyond the self, that is *transpersonal* (Koltko-Rivera, 2006).

Maslow's hierarchy is somewhat arbitrary; the order of such needs is not universally fixed. People have starved themselves to make a political statement. Today's evolutionary psychologists concur with the four basic levels of Maslow's needs pyramid. But they note that gaining and retaining mates, and parenting offspring, are also universal human motives (Kenrick et al., 2010).

Nevertheless, the simple idea that some motives are more compelling than others provides a framework for thinking about motivation. Worldwide life-satisfaction surveys support this basic idea (Oishi et al., 1999; Tay & Diener, 2011). In poorer nations that lack easy access to money and the food and shelter it buys, financial satisfaction more strongly predicts feelings of well-being. In wealthy nations, where most are able to meet basic needs, home-life satisfaction is a better predictor. Self-esteem matters most in individualist nations, whose citizens tend to focus more on personal achievements than on family and community identity.

✓ RETRIEVAL PRACTICE

- After hours of driving alone in an unfamiliar city, you finally see a diner. Although it looks deserted and a little creepy, you stop because you are *really* hungry. How would Maslow's hierarchy of needs explain your behavior?

ANSWER: According to Maslow, our drive to meet the physiological needs of hunger and thirst take priority over safety needs, prompting us to take risks at times in order to eat.

■ Hunger

A vivid demonstration of the supremacy of physiological needs came when Ancel Keys and his research team (1950) studied semistarvation by cutting the food intake of 36 male volunteers—all wartime conscientious objectors—in half. Without thinking about it, the men began conserving energy; they appeared listless and apathetic. After dropping, their body weights eventually stabilized at about 25 percent below their starting weights.

More dramatic were the psychological effects. Consistent with Maslow's idea of a needs hierarchy, the men became food-obsessed. They talked food. They daydreamed food. They collected recipes, read cookbooks, and feasted their eyes on delectable forbidden foods. Preoccupied with their unfulfilled basic need, they lost interest in sex and social activities. As one participant reported, "If we see a show, the most interesting part of it is contained in scenes where people are eating. I couldn't laugh at the funniest picture in the world, and love scenes are completely dull."

The semistarved men's preoccupations illustrated the power of activated motives to hijack our consciousness. When you are hungry, thirsty, fatigued, or sexually aroused, little else may seem to matter. When you're not, food, water, sleep, or sex just don't seem like such big things in your life, now or ever.

In University of Amsterdam studies, Loran Nordgren and his colleagues (2006, 2007) found that people in a motivational "hot" state (from fatigue, hunger, or sexual arousal) easily recall such feelings in their own past and perceive them as driving forces in others' behavior. Similarly, if preschool children eat salty pretzels, they understandably want water; but unlike children who are not thirsty, they also choose water over pretzels for

hierarchy of needs Maslow's pyramid of human needs, beginning at the base with physiological needs that must first be satisfied before higher-level safety needs and then psychological needs become active.

"Nobody wants to kiss when they are hungry."

Journalist Dorothy Dix (1861-1951)

"Nature often equips life's essentials—sex, eating, nursing—with built-in gratification."

Frans de Waal, "Morals Without God?," 2010