
MODULE 12

Environmental Influences on Behavior

Module Preview

Although genetic influences are pervasive, so are environmental influences. Nurture begins in the womb as embryos receive differing nutrition and varying levels of exposure to toxic agents. Sculpted by experience, neural connections multiply rapidly after birth. Parents influence children's manners as well as their political and religious beliefs. Peers are important in learning cooperation, for finding the road to popularity, and for inventing styles of interaction among people of the same age. Cultural groups evolve norms or rules that govern members' behaviors. They vary in their requirements for personal space, their expressiveness, their pace of life, and their child-rearing practices. Individualist and collectivist cultures have different effects on personal identity.

Differing sex chromosomes and differing concentrations of sex hormones lead to significant physiological sex differences. Yet, gender differences vary widely depending on culture. Cultural variations in gender roles demonstrate our capacity for learning and adapting. Both social and cultural factors contribute to gender identity and gender typing.

The biopsychosocial approach to development recognizes that we are products of both nature and nurture, of genes and environment. We are also architects of our future. The stream of causation runs through our present choices.

Module Guide

Parents and Peers

- ▶ Video: Module 2 of *The Brain* series, 2nd ed.: *The Effects of Hormones and Environment on Brain Development*
- ▶ ActivePsych: *Digital Media Archive*, 2nd ed.: *Activity, Exercise, and the Brain*

12-1. Describe how experience can modify the brain.

In the womb, embryos receive different nutrition and varying levels of exposure to toxic agents.

Normal stimulation during the early years is critical for optimal brain development. After brain maturation provides us with an abundance of neural connections, experience preserves our activated connections and unused connections degenerate (a process called *pruning*). Throughout life, our actions strengthen some neural pathways, while others weaken from disuse. We learn to keyboard or skateboard with increasing skill as our brain incorporates the learning.

- ▶ Lecture: Do Parents Really Matter?
- ▶ Exercise/Project: The Most Important Influence in One's Life
- ▶ Video: Program 6 of *Moving Images: Exploring Psychology Through Film: Do Parents Matter? Peer Influence*

- 12-2. *Explain why we should be careful in attributing children's successes and failures to their parents' influence, and evaluate the importance of peer influence on development.*

Parental influence is clearest at the extremes, for example, in the abused who become abusive and in the loved but firmly handled children who become self-confident and socially competent. Parental influence is also reflected in children's political attitudes, religious beliefs, and personal manners. However, environmental influences typically account for less than 10 percent of children's personality differences. This finding suggests that parents be given less credit for their children's successes as well as less blame for their failures.

Parental and peer influences are complementary. Parents are more influential when it comes to education, discipline, responsibility, orderliness, charitableness, and ways of interacting with authority figures. Peers are more important for learning cooperation, for finding the road to popularity, and for inventing styles of interaction among people of the same age. Parents can influence the culture that shapes the peer group by helping to select their children's neighborhood and schools.

Cultural Influences

- ▶ Lectures: Understanding Culture Differences in Relation to Individual Differences; The Geography of Time; Differences in Cultural Norms
- ▶ Exercise: Intercultural Learning Activities
- ▶ Exercise/Project: Cross-Cultural Dialogues
- ▶ Video: *Discovering Psychology, Updated Edition: Cultural Psychology*

- 12-3. *Describe how behavior is influenced by cultural norms.*

Culture is the behaviors, ideas, attitudes, values, and traditions shared by a group of people and transmitted from one generation to the next. Culture enables the preservation of innovation and the efficient division of labor.

All cultural groups evolve their own **norms**—rules that govern their members' behaviors. Although these rules sometimes seem oppressive, they also grease the social machinery. Cultures vary in their requirements for **personal space**, their expressiveness, and their pace of life. When cultures collide, their differing norms may make us uncomfortable.

Over time, cultures change. For example, with greater economic independence, today's women are less likely to endure abusive relationships out of economic need. Many minority groups enjoy expanded human rights. Not all culture change is positive. For example, within the last 40 years or so, the United States has seen sharply increased rates of divorce, delinquency, and depression. Changes in the human gene pool evolve far too slowly to account for these rapid cultural changes.

- ▶ Lecture: Individualism Versus Collectivism
- ▶ Exercises: Assessing Individualism/Collectivism; Independent and Interdependent Selves; Culture, Child-Rearing, and Sleeping Arrangements
- ▶ Feature Film: *Antz*

- 12-4. *Identify some ways a primarily individualist culture differs from a primarily collectivist culture, and compare their effects on personal identity and child-rearing.*

Individualist cultures value personal achievement and fulfillment as well as individual rights and liberties. Relationships are often temporary and casual, and confrontation is acceptable. Individualists tend to define identity in terms of personal traits, and they strive for personal control and individual achievement. **Collectivist** cultures value group goals and solidarity. Relationships tend to be close and enduring. Maintaining social harmony is important, and duty to family may trump personal career preferences. Collectivists derive their identity from belonging, and one's life task is to maintain social connections, fit in, and perform one's role.

While people in individualist cultures encourage independence in their children, those in collectivist cultures focus on emotional closeness. Children in collectivist cultures grow up with a

stronger sense of *family self*. The diversity of child-rearing practices makes it clear that children can thrive under various systems.

Gender Development

- ▶ Lectures: Gender Differences in Personality?; Are Women More Social?
- ▶ Exercises: Beliefs About the Personality Characteristics of Men and Women; Gender Differences on a Motor-Skills Task; Gender Differences in Smiling

12-5. *Discuss gender similarities and differences in psychological traits such as aggression, social power, and social connectedness.*

Males and females are similar in genetic makeup as well as levels of intelligence, vocabulary, and happiness. Males and females differ in body fat, muscle, height, and life expectancy. Females are more vulnerable to depression, anxiety, and eating disorders. In contrast, males are more likely to commit suicide and suffer alcohol dependence. They are also much more likely to be diagnosed with autism, color-blindness, and attention-deficit hyperactivity disorder as children and antisocial personalities as adults.

In surveys, men admit to more **aggression** than women, and experiments confirm that men tend to behave more aggressively, such as by delivering what they believe are painful shocks. The same difference is reflected in violent crime rates. The gender gap in physical aggression appears in many cultures and across various ages.

Throughout the world, men are perceived as more dominant, forceful, and independent, while women are viewed as more deferential, nurturant, and affiliative. In groups, leadership tends to go to males. In everyday behavior, men are more likely to talk assertively, to interrupt, to initiate touching, to smile less, and to stare.

In comparison to men, women are more concerned with making social connections. This gender difference surfaces early, in children's play. As teens, girls spend more time with friends and less time alone. In coping with stress, women more often turn to others for support. Women emphasize caring, often assuming responsibility for the very young and very old. Both men and women indicate that their friendships with women tend to be more intimate, enjoyable, and nurturing.

- ▶ Lectures: Innate Sex Differences; Abnormal Sex Chromosome Patterns
- ▶ Video: Program 5 of *Moving Images: Exploring Psychology Through Film: The Nature-Nurture Issue: Sex Reassignment*
- ▶ Instructor Video Tool Kit: *Sexual Identity Goes Awry; The Art of Listening: Males Versus Females; Love: The Mind-Body Connection*

12-6. *Explain how biological sex is determined, and describe the role of sex hormones in biological development and gender differences.*

Biological sex is determined by the twenty-third pair of chromosomes, the sex chromosomes. The member of the pair inherited from the mother is an X chromosome. The X (female) or Y (male) **chromosome** that comes from the father determines the child's sex. The Y chromosome triggers the production of the principal male sex hormone, **testosterone**, which in turn triggers the development of external male sex organs.

During the fourth and fifth prenatal months, the male's greater testosterone and the female's ovarian hormones have an impact on the brain's wiring. Recent research confirms male-female differences in brain areas with abundant sex hormone receptors during development. For example, during adulthood the part of the frontal lobes involved in verbal fluency is thicker in women, and the part of the parietal cortex involved in space perception is thicker in men.

- ▶ Lecture: Who Does the Housework?
- ▶ Exercises: Gender Roles in the Home; Learning Gender Roles; Sex-Role Egalitarianism Scale (SRES)

- ▶ Videos: Module 3 of *The Brain* series, 2nd ed.: *Gender Development: Social Influences*; Modules 1 and 24 of *Psychology: The Human Experience: Gender Roles and Gender Role Stereotypes*
- ▶ Instructor Video Tool Kit: *Are Today's Girls Academically Superior to Boys?*

12-7. *Discuss the importance of gender roles in development, and describe current views regarding gender typing.*

Although biology influences our gender, gender is also socially constructed, as the biopsychosocial approach reminds us. Culture shapes our roles: a **role** is a cluster of prescribed actions. For example, **gender roles**—our expectations about the way men and women behave—vary across cultures and time, as well as across generations. For instance, in nomadic societies of food-gathering people, there is little division of labor by sex. Thus, boys and girls receive much the same upbringing. In agricultural societies, women stay close to home, while men often roam more freely. Such societies typically socialize children into more distinct gender roles. Even among industrialized countries, gender roles vary greatly, for example, in the expectation that life will be more satisfying when both spouses work and share child care.

Society assigns each of us to the social category of male and female. The result is our **gender identity**, our sense of being male or female. To varying degrees, we also become **gender typed**, acquiring a traditional male or female role. **Social learning theory** assumes that children learn gender-linked behaviors by observing and imitating significant others and by being rewarded and punished. Thinking also matters. From their culture, children learn a concept or **gender schema** of what it means to be male or female and adjust their behavior accordingly.

Reflections on Nature and Nurture

- ▶ Exercise: Self-Efficacy

12-8. *Describe the biopsychosocial approach to development.*

Nature and nurture jointly form us. That is, we are products of natural selection and heredity as well as cultural, family, and peer influences. But we are also open systems—that is, creators as well as creatures of our worlds. We respond to the world's response to us, and the stream of causation runs through our present choices. Our hopes, goals, and expectations influence our future. Our decisions today design our environments tomorrow.