
Emerging Adulthood: Cognitive Development

Chapter Preview

During the course of adulthood, there are many shifts in cognitive development—in the speed and efficiency with which we process information, in the focus and depth of our cognitive processes, perhaps in the quality, or wisdom, of our thinking. Developmental theorists use three different approaches to explain these shifts, with each approach providing insights into the nature of adult cognition. This chapter takes a stage approach, describing a new stage of thinking and reasoning that builds on Piaget’s formal operational thinking.

The chapter begins by describing how adult thinking differs from adolescent thinking. The experiences and challenges of adulthood result in this new postformal thought, evidenced by practical, flexible, and dialectical thought—the dynamic, in-the-world cognitive style that adults typically use to solve the problems of daily life.

During adulthood, moral reasoning may also progress, especially in response to such significant life experiences as a college education and parenthood.

The final section examines the effect of the college experience on cognitive growth; findings here indicate that years of education correlate with virtually every measure of cognition as thinking becomes progressively more flexible and tolerant.

What Have You Learned?

The “What Have You Learned?” questions at the end of the text chapter are reprinted here for your convenience in checking students’ understanding of the chapter contents.

1. Why did scholars choose the term postformal to describe the fifth stage of cognition?
2. How does postformal thinking differ from typical adolescent thought?
3. Why is time management a cognitive issue?
4. How does delay discounting relate to eating or exercising?
5. How does the maturation of the prefrontal cortex affect social understanding?
6. What is the relationship between subjective and objective thought?
7. How is listening to other opinions a measure of cognitive flexibility?
8. How could the threat of a stereotype affect cognition?
9. Which groups of people are vulnerable to stereotype threat and why?
10. Why does the phrase “broken home” indicate a lack of dialectical thought?
11. What differences are apparent in typical Asian and Western thinking?
12. Why do adults make more decisions involving morality than adolescents do?
13. Why do people disagree about whether or not something is a moral issue?
14. What is Gilligan’s idea of the difference between male and female morality?
15. Why would decisions about reproduction be a catalyst for moral thought?

16. How are Fowler's stages similar to Piaget's and Kohlberg's stages?
17. Why might a devout person criticize Fowler's concept of the stages of faith?
18. What do most students hope to gain from a college education?
19. According to Perry, how does students' thinking change during their college career?
20. How do current college enrollment patterns differ from those 50 years ago?
21. What are the differences between public and private colleges in the United States?
22. What evidence suggests that college fosters intellectual growth?

Chapter Guide

- ▶ “On Your Own” Activities: Developmental Fact or Myth?; Portfolio Assignment
- ▶ AV: The Journey Through the Life Span, Program 7: Early Adulthood; Transitions Throughout the Life Span, Program 18: Early Adulthood: Cognitive Development
- ▶ Teaching Tip: Adding a Service-Learning Project to the Course

Introducing Emerging Adulthood: Cognitive Development

Instructional Objective: To introduce students to the different approaches to explaining adult cognitive development.

1. Developmental theorists use three different approaches to explain adult cognitive development:
 - a. The *stage approach* emphasizes the possible emergence of a new stage of thinking and reasoning that builds on the skills of formal operational thinking.
 - b. The *psychometric approach* focuses on changes in the components of intelligence as measured by IQ tests.
 - c. The *information-processing approach* is primarily concerned with the encoding, storage, and retrieval of information.

I. Postformal Thought

Instructional Objective: To contrast adolescent thought with adult thought, and to demonstrate the characteristics of postformal thought.

- ▶ Classroom Activities: The Flexible Nature of Cognition; Pedagogy and “Andragogy?”
 - ▶ “On Your Own” Activity: Assessing Tacit Knowledge
 - ▶ Critical Thinking Activity: Thinking in Emerging Adulthood
 - ▶ Observational Activity: Describing the Development of a Developmental Psychologist
1. Compared with adolescent thinking, adult thinking becomes more practical, flexible, and dialectical.
 2. Some researchers believe that the cognitive challenges of adulthood result in a new stage of cognitive development, **postformal thought**, in which thinking is less abstract and less absolute than formal operational thought. It is characterized by “problem finding,” not just “problem solving.” One of the practical skills of postformal thought is the ability to combine **subjective thought**, which arises from the personal experiences and perceptions of an individual, and **objective thought**, which follows abstract logic. However, not all scholars agree that there are stages of adult cognition.
 3. **Delay discounting** is a logical error in which people undervalue, or ignore, future consequences in favor of more immediate gratification. Psychoactive drugs such as alcohol and marijuana make this error more likely. Adolescents are particularly likely to ignore future consequences, but gradually, over the years of adulthood, people become better able to plan ahead.
 4. The difference between the reasoning maturity of adolescents and that of young adults is particularly apparent when the problems to be solved are emotionally charged. Older adults combine (and balance) emotions and intellect, personal experience and knowledge.

5. A hallmark of postformal cognition is intellectual flexibility, the ability to reflect on their options and combine emotions and reason in finding a solution to a problem.
6. This flexibility is needed to counter stereotypes. Feeling threatened by a stereotype evokes anxiety and a form of disidentification in which self-esteem is disconnected from the trait in question. Thus, **stereotype threat** can disrupt cognition, as well as emotional regulation.
7. Stereotype threat can make women and minorities doubt their intellectual ability. As a result they may become anxious in academic contexts and disidentify with intellectual achievement. Research studies have shown that intellectual performance among students increases if they *internalize* the concept that intelligence is plastic and can be changed.
8. **Dialectical thought**, considered to be the most advanced form of cognition, involves considering both sides of an idea simultaneously and then forging them into a **synthesis** that integrates both the original idea (**thesis**) and its opposite (**antithesis**).
9. Dialectical thinking involves the constant integration of beliefs and experiences with all the contradictions and inconsistencies of daily life. Life-span change is a dynamic, dialectical process.
10. The result of dialectical thinking is a continuously evolving view of oneself and the world. This gives the dialectical thinker a broader and more flexible perspective that is better suited to the changing demands of adulthood.
11. Some cultures encourage flexible, dialectical reasoning more than others. All researchers agree that differences between Eastern and Western thinking are the result of nurture and that no one way of thinking is better than the other.

II. Morals and Religion

Instructional Objective: To discuss the effect of the responsibilities of emerging adulthood on moral reasoning and religious beliefs.

- AV: Moral Development; Socialization: Moral Development
 - Classroom Activities: *Classroom Debate*: “Resolved: Males and Females Are Socialized to Approach Moral Questions in Different Ways”; *Problem-Based Learning*: Cheating Teachers
1. Many researchers believe that the responsibilities, experiences, and education of adulthood affect moral reasoning and religious beliefs.
 2. According to one expert, one catalyst for shifts in moral thinking is the experience of college, especially when coursework focuses on ethical issues.
 3. Culture and age affect how one views moral issues. It seems that the process (not necessarily the outcome) improves with age.
 4. Carol Gilligan believes that in matters of moral reasoning, males tend to develop a **morality of justice**, whereas females tend to put human needs above justice principles and develop a **morality of care**.
 5. Other research does not support Gilligan’s views. Education, specific dilemmas, and culture, for example, correlate more with whether a person’s morality focuses on relationships or absolutes.
 6. The current approach to research on moral reasoning is based on a series of questions about moral reasoning developed by James Rest and called the **Defining Issues Test (DIT)**. In general, scores on this test increase with age and with each year of college education.
 7. James Fowler has provided the most detailed description of the development of faith. He delineates six stages: *intuitive-projective faith*, *mythic-literal faith*, *synthetic-conventional faith*, *individual-reflective faith*, *conjunctive faith*, and *universalizing faith*.
 8. Although not everyone agrees with Fowler’s stage theory of faith, the idea that religion plays an important role in human development is widely accepted.

III. Cognitive Growth and Higher Education

Instructional Objective: *To give students a better sense of the relationship between higher education and cognitive growth.*

► Teaching Tip: The Changing Nature of Higher Education

1. Compared with other adults, college graduates tend to be healthier and wealthier. They smoke less, eat better, exercise more, and live longer.
2. According to William Perry, the thinking of college students progresses through nine levels of complexity that range from a simplistic either/or dualism to a more relativistic one that acknowledges a multiplicity of perspectives.
3. The demographic characteristics of college student bodies have changed considerably in recent years. Colleges now include more female, low-income, ethnic-minority, older, part-time, and career-focused students than they did in the past. Another cohort difference is that most of today's college students seek financial security rather than a general education. Students today also are technologically savvy.
4. Over the last 50 years, the number of colleges in the United States has doubled and enrollment has greatly expanded. Income is an indicator of college success, with a higher dropout rate among lower-income students.
5. The evidence suggests that the greater diversity on college campuses today helps students develop deeper, more flexible thinking.