Think of our contradictory stereotypes about the teenage mind. Teenagers are idealistic, thoughtful, introspective; concerned with larger issues; pondering life in deep ways; but also impulsive, moody, and out of control. Adolescents are the ultimate radicals, rejecting everything adults say, and consummate conformists, dominated by the crowd, totally influenced by their peers.

These contradictory ideas are mirrored in confusing laws about when society views teens as "adults." In the United States, adolescents can sometimes be tried in adult courts at 14, an age when they are barred from seeing R-rated movies. Mature enough to vote at age 18, U.S. teens are unable to buy liquor until age 21. How is science shedding light on the teenage mind? That is the subject of the chapter you are about to read.

Setting the Context

Learning Outcome

- Explain how teenagerhood evolved.

> Youth are heated by nature as drunken men by wine.
>
> (Aristotle, n.d.)

> I would that there were no age between ten and twenty-three . . . , for there's nothing in between but getting wenches with child, wronging the ancientry, stealing, fighting. . . .
>
> (William Shakespeare, *The Winter's Tale*, Act III)

As these quotations illustrate, throughout history, world-class geniuses have viewed young people as hot-headed and out of control. When, in 1904, G. Stanley Hall first identified a life stage characterized by **storm and stress**, which he called *adolescence*, he was echoing these timeless ideas. Moreover, as youths' mission is to view the world in fresh new ways, it makes sense that society would naturally view each new generation in ambivalent terms — praising young people for their passion, fearing them as a threat.

storm and stress G. Stanley Hall's phrase for the intense moodiness, emotional sensitivity, and risk-taking tendencies that characterize the life stage he labeled adolescence.

However, until relatively recently, young people never had time to rebel against society because they took on adult responsibilities at an early age. As I described in Chapter 1, adolescence became a distinct stage of life in the United States only during the twentieth century, when — for most children — going to high school became routine (Mintz, 2004; Modell, 1989; Palladino, 1996).

Look into your family history and you may find a great-grandparent who finished high school or college. But a century ago, most U.S. children left school after sixth or seventh grade to find work (Mintz, 2004). Unfortunately, however, in the 1930s during the Great Depression, there was little work to be found. Idle young people roamed the countryside, angry and depressed. Alarmed by this situation, the Roosevelt administration proposed laws to lure young people to school. The legislation worked. By 1939, 75 percent of all U.S. teenagers were attending high school.

As illustrated in this famous 1930s photograph of a migrant family traveling across the arid Southwest to search for jobs in California, there was no real adolescence during the Great Depression because many children had to work from an early age to help support their families.

Library of Congress, Prints & Photographs Division [LC-DIG-fsa-8b31933]

High school boosted the intellectual skills of a whole cohort of Americans. But it produced a generation gap between young people and their less educated, often immigrant parents; it encouraged adolescents to spend their days in isolated, age-segregated groups. Then, during the 1950s, when entrepreneurs targeted products to this new, lucrative "teen" market, we developed our familiar adolescent culture, with its distinctive music and dress (Mintz, 2004; Modell, 1989).

The sense of young people bonding together against their elders peaked during the late 1960s and early 1970s. With "Never trust

Table 9.1: Stereotypes About Adolescence: True or False?

T/F	1. Adolescents think about life in deeper, more thoughtful ways than children do.
T/F	2. Adolescence is when we develop our moral code for living.
T/F	3. Adolescents are highly sensitive to what other people think.
T/F	4. Adolescents are unusually susceptible to peer influences.
T/F	5. Adolescents are highly emotional compared to other age groups.
T/F	6. Adolescents are prone to taking risks.
T/F	7. Most adolescents are emotionally disturbed.
T/F	8. Suicide is relatively common during adolescence.
T/F	9. Adolescents feel more stressed out with their parents than with their peers.
T/F	10. Getting in with a bad crowd makes teenagers "go down the wrong path."
	(Answers: 1. T, 2. T, 3. T, 4. T, 5. T, 6. T, 7. F, 8. F, 9. T, 10. T)

anyone over 30" as their slogan, the baby-boom cohort rejected the rules relating to marriage and gender roles and transformed the way we live (see Chapter 1).

This chapter explores adolescence in the contemporary developed world — a time when we expect every teenager to finish high school and insulate young people from adult life for almost a decade after they reach puberty. First, I'll examine cognition and teenage emotions, then chart how teenagers separate from their parents and relate in groups.

Before beginning, you might take the "Stereotypes About Adolescence: True or False?" quiz in Table 9.1. In the following pages, I'll discuss why each stereotype is right or wrong.

Learning Outcomes

- Outline Piaget's, Kohlberg's, and Elkind's perspectives on adolescence.
- Explore adolescent brain development, teenage risk-taking, and storm and stress.
- Predict which teens are at risk for getting into serious trouble and which teens flourish.
- Evaluate how society and high schools can better fit the teenage mind.
- Explain how to help adolescents of color thrive academically.

Cognitive and Emotional Development: The Mysterious Teenage Mind

Thoughtful and introspective, but impulsive and out of control; peer-centered conformists and rebellious risk-takers; capable of making mature decisions, but needing to be sheltered from the world — can teenagers *really* be all these things? In our search to explain these contradictions, let's look at three classic theories of teenage thinking, then explore research related to teenage storm and stress.

Three Classic Theories of Teenage Thinking

Have a conversation with a 10-year-old and a 16-year-old and you will be struck by the incredible mental growth. It's not so much that teenagers know more than fourth or fifth graders, but that adolescents *think* in a different way. With an elementary school child, you can have a rational conversation about daily life. With a teenager, you can have a rational talk about *ideas*. This ability to reason abstractly defines Jean Piaget's formal operational stage.

Formal Operational Thinking: Abstract Reasoning at Its Peak

formal operational stage Jean Piaget's fourth and final stage of cognitive development, reached at around age 12 and characterized by teenagers' ability to reason at an abstract, scientific level.

In concrete operations, children look beyond the way objects immediately appear. They realize that when Mommy puts on a mask, she's still Mommy "inside." They understand that when you pour a glass of juice into a different-shaped glass, the amount of liquid remains the same. Piaget believed that during the **formal operational stage**, at around age 12, thinking takes a qualitative leap (see Table 9.2). Adolescents can think logically in the realm of pure thought.

Table 9.2: Piaget's Stages: Focus on Adolescence

Age	Name of Stage	Description
0–2	Sensorimotor	The baby manipulates objects to pin down the basics of physical reality.
2–7	Preoperations	Children's perceptions are captured by their immediate appearances: "What they see is what is real." They believe, among other things, that inanimate objects are really alive and that if the appearance of a quantity of liquid changes (for example, if it is poured from a short, wide glass into a tall, thin one), the amount of liquid itself changes.
7–12	Concrete operations	Children have a realistic understanding of the world. Their thinking is really on the same wavelength as that of adults. While they can reason conceptually about concrete objects, however, they cannot think abstractly in a scientific way.
12+	Formal operations	Reasoning is at its pinnacle: hypothetical, scientific, flexible, fully adult. We have reached our full cognitive human potential.

Adolescents Can Think Logically About Concepts and Hypothetical Possibilities Ask fourth or fifth graders to put objects such as sticks in order from small to large, and they effortlessly perform this concrete operational task. But give a similar verbal challenge – such as "Bob is taller than Beau, and Beau is taller than Bran. Who is the tallest?" – and children are lost. The reason is that only adolescents can logically manipulate concepts in their *minds* (Elkind, 1968; Flavell, 1963).

Moreover, if you give a concrete operational child a reasoning task that begins, "Suppose snow is blue," she will refuse to go further, saying, "That's not true!" Adolescents in formal operations have no problem tackling that question because, once cognition is liberated from concrete objects, we can reason about concepts that may *not* be real.

Adolescents Can Think Like Real Scientists When we think abstractly, we can approach problems in a systematic way, devising a strategy to scientifically prove that something is true.

Piaget designed an exercise to reveal this scientific thought: He presented children with a pendulum apparatus and unattached strings and weights (see Figure 9.1). Notice that the strings differ in length and that the weights vary in size or heaviness. The children's task was to connect the weights to the strings, then attach them to the pendulum, to decide which influence determined how fast the pendulum swung from side to side. Was it the length of the string, the heaviness of the weight, or the height from which the string was released?

Think about this problem, and you may realize that in order to solve this task, you must keep everything the same except the factor whose influence you want to assess. (This is the defining characteristic of the experimental method described in Chapter 1.) To test whether it's the heaviness of the weight, keep the string length and the height from which you drop it constant, varying only the weight; then isolate another force, keeping everything else the same. When you vary just the string length, you will realize that this influence alone determines how fast the pendulum swings.

Elementary school children, Piaget discovered, approach these problems haphazardly. Only adolescents can adopt an "experimental" strategy to solve reasoning tasks (Flavell, 1963; Ginsburg & Opper, 1969).

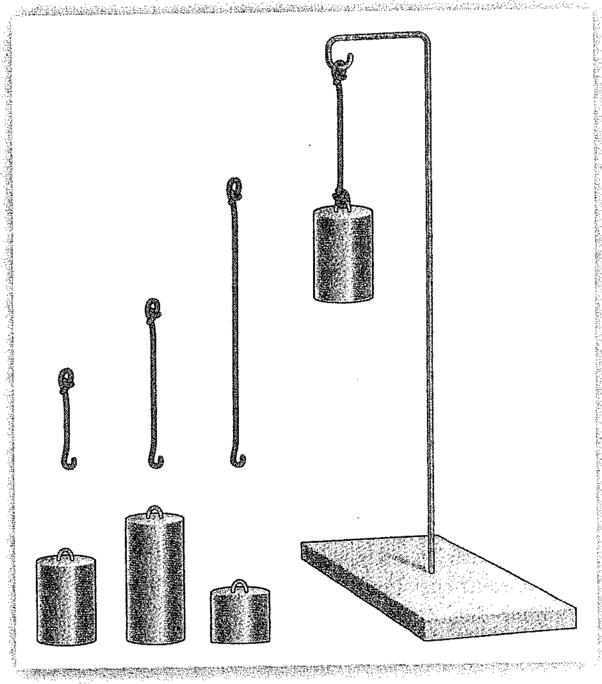
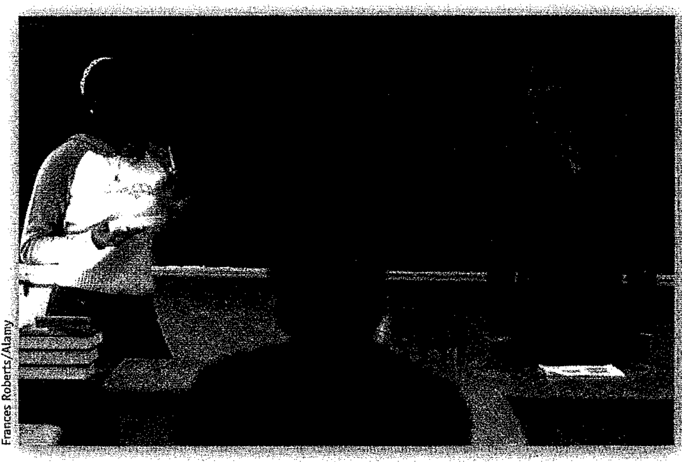


Figure 9.1: Piaget's pendulum apparatus: A task to assess whether children can reason scientifically Piaget gives the child different weights and string lengths, illustrated here, and shows how to attach them to the pendulum (and to one another). Then he says, "Your task is to discover what makes the pendulum swing more or less rapidly from side to side—is it the length of the string, the heaviness of the weight, or the height (and force) from which you release the pendulum?" and watches to see what happens.


Frances Roberts/Alamy

Reaching formal operations allows this award-winning debate team to smoothly argue for the validity of contrasting views.

How Does This Change in Thinking Apply to Real Life? This ability to think hypothetically and scientifically explains why it's only in high school that we can thrill to a poetic metaphor or comprehend chemistry experiments (Kroger, 2000). It's only during adolescence that we can join the debate team and argue for or against abortion, no matter what we *personally* believe. In fact, reaching formal operations explains why teenagers are famous for debating *everything* in their lives. A 10-year-old who wants to stay up till 2 A.M. will just keep saying, "I don't want to go to bed." A teenager can lay out his case point by point: "Mom, I got enough sleep last night. Besides, I only need six hours of sleep. I can go to bed after school tomorrow."

But do *all* adolescents reach formal operations? The answer is no. Most of us never make it to Piaget's final stage.

In one late-twentieth-century study, only a fraction of adults approached the pendulum problem scientifically. When asked to debate an issue, most did not even realize that they needed to use evidence to construct their case (Kuhn, 1989)!

Does cognition *ever* change during adolescence in the way Piaget predicts? The answer is yes. Formal operational skills swing into operation when older teens plan their future lives.

Think back to the skills it took to get into college. You may have learned about your options from an adviser, researched possibilities on the Internet, and constructed different applications to showcase your skills. Then, when you got accepted, you needed to reflect on your future self again: "This school works financially, but is it too large? How will I feel about moving far from home if the COVID crisis erupts again? Will I take classes online or live on campus next year?" Would you have been able to mentally weigh these alternatives at age 10, 12, or 14?

The bottom line is that reaching concrete operations puts us on the same wavelength as adults. Formal operational thinking allows us to *behave* like adults.

Jacky Chapman/Photofusion Picture Library/Alamy

Discussing your plans with an adviser and realistically assessing your interests and talents demands the future-oriented adult thinking that only becomes possible in late adolescence. So, even if they don't reason at the formal operational level on Piaget's laboratory tasks, these high school seniors are probably firmly formally operational in how they think about their lives.

Kohlberg's Stages of Moral Judgment: Developing Internalized Moral Values

This new ability to reflect on our future allows us to fully ponder our values. Therefore, drawing on Piaget's theory, developmentalist Lawrence Kohlberg (1981, 1984) argued that, during adolescence, we can develop a moral code that guides our lives. To measure this moral code, Kohlberg constructed ethical dilemmas, had people reason about these scenarios, and asked raters to chart the responses according to the three levels of moral thought outlined in Table 9.3. Before looking at the table, take a minute to respond to the "Heinz dilemma," the most famous problem on Kohlberg's moral judgment test:

> A woman was near death from cancer. One drug might save her. The druggist was charging . . . ten times what the drug cost him to make. The . . . husband, Heinz, went to everyone he knew to borrow the money but he could only get together about half of what it cost. [He] asked the . . . druggist to sell it cheaper or let him pay later. But the druggist said NO! Heinz broke into the man's store to steal the drug. . . . Should he have done that? Why?
>
> (adapted from Reimer, Paolitto, & Hersh, 1983)

Table 9.3: Kohlberg's Three Levels of Moral Reasoning, with Sample Responses to the Heinz Dilemma

Preconventional Thought
Description: Person operates according to a "Will I be punished or rewarded?" mentality.
Reasons given for acting in a certain way: (1) To avoid getting into trouble or to get concrete benefits. (2) Person discusses what will best serve his own needs ("Will it be good for me?"), although he may also recognize that others may have different needs.
Examples: (1) Heinz shouldn't steal the drug because then the police will catch him and he will go to jail. (2) Heinz should steal the drug because his wife will love him more.
Conventional Thought
Description: Person's morality centers on the need to obey society's rules.
Reasons given for acting in a certain way: (1) To be thought of as a "good person." (2) The idea that it's vital to follow the rules to prevent a breakdown in society.
Examples: (1) Heinz should steal the drug because that's what "a good husband" does; or Heinz should not steal the drug because good citizens don't steal. (2) Heinz can't steal the drug—even though it might be best—because, if one person decides to steal, so will another and then another, and then the laws would all break down.
Postconventional Thought
Description: Person has a personal moral code that transcends society's rules.
Reasons given for acting a certain way: (1) Talks about abstract concepts, such as taking care of all people. (2) Discusses the fact that universally valid moral principles transcend anything society says.
Examples: (1) Although it's wrong for Heinz to steal the drug, we have an ethical obligation to disobey society's rules to stand up for what's truly right. (2) Nothing is more important than telling the truth about social wrongs and prioritizing human life!
Information from Reimer, Paolitto, & Hersh, 1983.

If you thought in terms of whether Heinz would be personally punished or rewarded for his actions, you would be classified at the lowest moral level, **preconventional thought**. Responses such as "Heinz should not take the drug because he will go to jail" or "Heinz should take the drug because then his wife will treat him well" suggest that, because your focus is on external consequences (whether Heinz will get in trouble or be praised), you are not demonstrating *any* moral sense.

If you made comments such as "Heinz shouldn't [or should] steal the drug because it's a person's duty to obey the law [or to stick up for his wife]" or "Yes, human life is sacred, but the rules must be obeyed," your response is classified as **conventional thought**—the level where adults typically rank. This shows your morality centers around the need to uphold society's norms.

People who reason about this dilemma using their own moral guidelines *apart* from society are operating at Kohlberg's highest moral level, **postconventional thought**. A response that shows postconventional reasoning might be, "Heinz had to steal the drug because nothing outweighs the universal principle of saving a life."

When Kohlberg conducted studies with different age groups, he discovered that at age 13, preconventional answers were universal. By 15 or 16, most children around the world were reasoning at the conventional stage. But many of us stop right there. Although some of Kohlberg's adults did think postconventionally, using his *incredibly* demanding criteria, almost no person consistently made it to the highest moral stage (Reimer, Paolitto, & Hersh, 1983; Snarey, 1985).

preconventional thought In Lawrence Kohlberg's theory, the lowest level of moral reasoning, in which people approach ethical issues by only considering the personal punishments or rewards of their actions.

conventional thought In Lawrence Kohlberg's theory, the intermediate level of moral reasoning, in which people respond to ethical issues by discussing the need to uphold social norms.

postconventional thought In Lawrence Kohlberg's theory, the highest level of moral reasoning, in which people respond to ethical issues by applying their own moral guidelines apart from society's rules.

How Does Kohlberg's Theory Apply to Real Life? Kohlberg's categories get us to think deeply about our values. Do you have a moral code that guides your actions? Would you intervene, no matter what the costs, to save a person's life? These categories give us insights into other people's moral priorities. While reading about Kohlberg's preconventional level, you might have thought: "I know someone like this. That person has no ethics, and only cares about getting caught!"

However, Kohlberg's idea that children can't go beyond a punishment-and-reward mentality is wrong. As I described in Chapter 3, our basic sense of fairness kicks in before we begin to speak!

In a classic late-twentieth-century paper, psychologist Carol Gilligan offered an influential critique of Kohlberg's ideas. Recall that postconventional thinking requires abstractly weighing ideals of justice. Women's morality, Gilligan believes, revolves around concrete, caring-oriented criteria: "Hurting others is wrong"; "Moral people reach out in a nurturing way" (Gilligan & Attanucci, 1988).

Is Kohlberg's scale *valid*? Does the way teenagers reason about artificial scenarios mirror their ethics in the real world? Not necessarily. When exceptionally prosocial teenagers (for example, community leaders who set up programs for people who were homeless) took Kohlberg's test, researchers rated their answers at the same conventional stage as non-prosocial teens! (See Reimer, 2003.)

It makes sense that the way someone *talks* about morality doesn't necessarily reflect behavior. We all know adults who spout the highest ethical principles but act despicably — the minister who lectures a congregation about the sanctity of marriage while having multiple affairs, the chairperson of the state ethics committee who takes bribes for years.

Still, when Kohlberg describes changes in moral reasoning during adolescence, he makes an important point. Teenagers are famous for questioning unjust rules and pushing society to operate in ethical ways. Teens helped power the U.S. fight for gun-control laws; they are foot soldiers in the racial justice movement upending the world. Unfortunately, this ability to see the world as it should be, but rarely is, may help propel the emotional storms and stresses of teenage life.

Norma Jean Gargasz/AGE Fotostock

Taking to the streets to advocate for stronger gun safety laws is apt to be a life-changing experience for these teens. It also is a developmental landmark, as advances in moral reasoning make adolescents exquisitely sensitive to social wrongs.

Elkind's Adolescent Egocentrism: Explaining Teenage Storms

This was David Elkind's (1978) conclusion when he drew on Piaget's concept of formal operations to make sense of teenagers' emotional states. Elkind argued that when children make the transition to formal operational thought at about age 12, they see beneath the surface of adult rules. A sixth-grader realizes that his 10 o'clock bedtime, rather than being carved in stone, is an arbitrary number capable of being contested and changed. A socially conscious 14-year-old becomes acutely aware of the difference between what adults *say* they do and how they act. The same parents and teachers who punish you for being late can't get to the dinner table or arrive at meetings on time.

According to Elkind, the realization that the emperor has no clothes ("Those godlike adults are no better than me") leads to anger, anxiety, and the impulse to rebel. From arguing with a ninth-grade English teacher over a grade to testing the speed limit by driving too fast, teenagers are famous for protesting anything just because it's "a rule."

More tantalizing, Elkind draws on formal operational thinking to make sense of the classic behavior we observe in young teens — their sensitivity to what other people think. According to Elkind, when children first become attuned to other people's flaws, the feeling turns inward to become an obsession with what others think about their *own* personal flaws. This produces **adolescent egocentrism** — the distorted feeling that one's own actions are at the center of everyone else's consciousness.

adolescent egocentrism David Elkind's term for the tendency of young teenagers to feel that their actions are at the center of everyone else's consciousness.

So, 13-year-old Melody drives her parents crazy. She objects to everything, from the way they dress to how they chew their food. When her mother picks her up from school, she will not let this humiliating person leave the car: "Mom, I don't know you!" She does not spare herself: A minuscule pimple is a monumental misery; stumbling and spilling her food on the school lunch line is a source of total shame ("Everyone is laughing at me! My life is over!"). According to Elkind, a facet of adolescent egocentrism called the **imaginary audience** evokes this intense self-consciousness. Young teens literally feel like they are on stage, with everyone watching everything they do.

imaginary audience David Elkind's term for the tendency of young teenagers to feel that everyone is watching their every action; a component of adolescent egocentrism.

A second component of adolescent egocentrism is the **personal fable**. Teenagers feel that their own experiences are unique. So, Melody believes that no one has ever suffered as disgusting a blemish. She has the *most* embarrassing mother in the world.

personal fable David Elkind's term for young teenagers' tendency to believe that their lives are special and heroic; a component of adolescent egocentrism.

These mental distortions explain the exaggerated emotional storms that we adults laugh about during the early adolescent years. Unfortunately, the "It can't happen to me" component of the personal fable may also lead to tragic acts. Teenagers put their health at risk by hosting parties during a pandemic because they believe they can't get sick. And, if they do catch the virus and are hospitalized, they may reason, "I will finally be the center of attention, a real heroine!"

Studying Three Aspects of Storm and Stress

Are teenagers unusually sensitive to other people's reactions? Is Elkind (like other observers, from Aristotle to Shakespeare to G. Stanley Hall) correct in saying that risk-taking is intrinsic to being a "hot-headed youth"? Are adolescents really highly emotional and/or likely to be emotionally disturbed? For answers, let's turn to research that explores these three core aspects of teenage storm and stress.

Are Adolescents Exceptionally Socially Sensitive?

In Chapter 8, I described that when they reach puberty, children — especially girls — become attuned to each physical flaw. I documented how social media thrives on the teenage passion to continually compare oneself to a rotating cast of peers. Actually, when researchers ask middle schoolers to list their priorities, preteens rank social success as their top concern. Being in the "popular crowd" is more important than being a scholar, being nice, or even having friends (Ferguson & Ryan, 2019)!

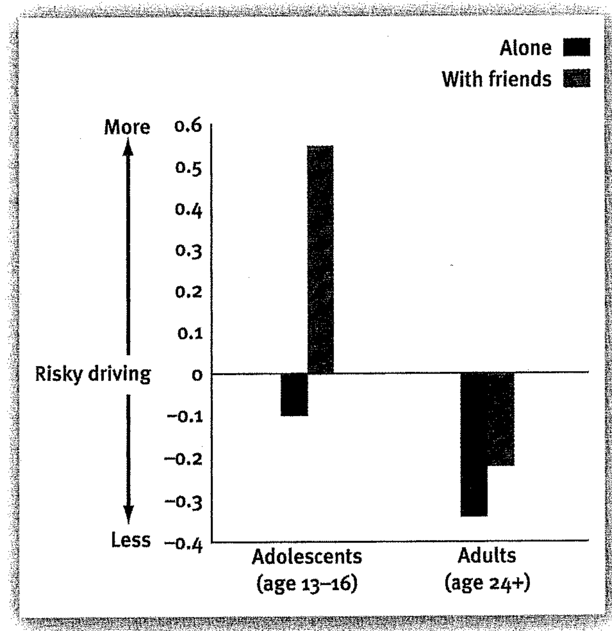
Moreover, as Elkind would predict, adolescents are hypersensitive to other people's emotions. Teens act impulsively, *specifically* in arousing situations with friends (Steinberg, 2016). This tendency — illustrated in the study described in the How Do We Know box — is mirrored in neural changes (Breiner and others, 2018). Reward regions of the cortex light up when teens make risky decisions, but only when friends watch (A. R. Smith and others, 2018).

So the answer to the question of whether adolescents are more socially sensitive is absolutely yes, especially around the pubertal years!

HOW DO WE KNOW . . .

that adolescents make riskier decisions when they are with their peers?

Teenagers' heightened social sensitivity gives us strong evidence that they do more dangerous things in arousing situations with friends. A classic, ingenious video study scientifically drove this point home. Researchers (Gardner & Steinberg, 2005) asked younger teenagers (ages 13 to 16), emerging adults (aged 18 to 22), and adults (aged 24 and over) to play a computer game that involves earning extra points by taking risks, such as continuing to drive a car after a traffic light had turned yellow. They assigned the members of each age group to two conditions: Either play the game alone or in the presence of two friends.



Risky driving tendencies of young teens versus adults when in peer situations and when alone.

The chart shows the intriguingly different findings for younger teenagers and people over age 24. Notice that, while being with other people had no impact on risky decision making in adults, it had an enormous effect on young teens, who were much more likely to risk crashing the car by driving farther after the yellow light appeared when with friends. Bottom line: Watch for risky behavior when groups of teenagers are together—a fact to consider the next time you see a car full of adolescents barreling down the road with music playing full blast!

Are Adolescents Risk-Takers?

> Doing something and getting away with it . . . is the best. Driving at 85 miles an hour, shoplifting from the store, and then you just say "hi" to a police officer as he walks by . . .

This quote and the research in the previous section suggest (no surprise) that the second storm-and-stress stereotype is *definitely true*. From the thrill of stealing or speeding, risk-taking is a basic feature of teenage life (Duell and others, 2018).

This mainly male lure to test the limits escalates as puberty unfolds. Its driver is the surge of testosterone that floods the bodies of boys (Harden and others, 2018; Laube, Lorenz, & van den Bos, 2020).

Consider, for instance, yearly nationwide University of Michigan–sponsored polls that track U.S. young people's lives. Researchers find that 1 in 6 (mainly male) teens has been arrested by age 18. By age 26, the arrest rate slides up to more than 1 in 4 (Brame and others, 2012)! The good news is that, in recent years, teenage binge drinking rates have dramatically declined. In a 2019 survey, only 3 percent of adolescents admitted to having 10 or more drinks at least once during the past 30 days (CDC, 2020e). (Table 9.4 showcases some interesting research facts related to alcohol and adolescents.)

Table 9.4: Stereotypes and Surprising Research Facts About Alcohol and Teens

Stereotype #1: Teenagers who drink are prone to abuse alcohol later in life.

Research answer: "It depends on *when* you begin." Drinking during puberty is a risk factor for later alcohol problems (Spear, 2018). However, during the late teens and early twenties, binge drinking—in Western societies—is often encouraged and then tends to decline when people assume adult roles such as marriage and parenthood (Gates, Corbin, & Fromme, 2016). So we can't use a person's consumption at these peak-use ages to predict the rest of adulthood.

Stereotype #2: Getting involved in sports protects a teen from abusing alcohol.

Research answer: "Not really." Heavy athletic involvement is correlated with binge drinking for boys (Williams and others, 2020). This research points (again) to the pivotal role of peers. Drinking (no surprise) is a prominent feature of jock culture, *specifically* during the high school years.

Stereotype #3: Middle childhood problems are risk factors for later excessive drinking.

Research answer: "Both true and surprisingly false." As you might expect, impulse control problems predict problem drinking (Lopez-Caneda and others, 2014). However, two longitudinal investigations—conducted in the United States and Great Britain—revealed that, for girls, high academic achievement was a risk factor for heavy drinking in the early twenties (Englund and others, 2008; Maggs, Patrick, & Feinstein, 2008)! To explain this uncomfortable finding, researchers suggest that girls who do well academically tend to go to college, where, again, the peer culture encourages drinking to excess.

And, in contrast to our images of rampant teenage substance abuse, most high school seniors do not report using *any* drugs, as you can see in Figure 9.2. The bad news is that—for an alarming fraction of young people in the United States—encounters with the criminal justice system are a depressing feature of modern life.

Young children also rebel, disobey, and test the limits. But, if you have seen a group of teenage boys hanging from a speeding car, you know that the risks adolescents take can be life threatening. At the very age when they are most physically robust, teenagers—especially males—are most likely to die of accidents (Dahl, 2004; Spear, 2008). As the United States witnessed in 2020, when hordes of mask-less teens and twenty-somethings packed into bars during the pandemic, for young people, health risks take a distant second place to the passion to bond with peers. So, yes, parents can worry about their children—particularly their sons—when they haven't made it home from a party and it's already 2 A.M.!

Although over-the-top mask-less gatherings (such as this one in July 2020) can be COVID super-spreader events, nothing can prevent the teenage drive to closely connect in groups.

Ilan Deutsch/Paris Match via Getty Images

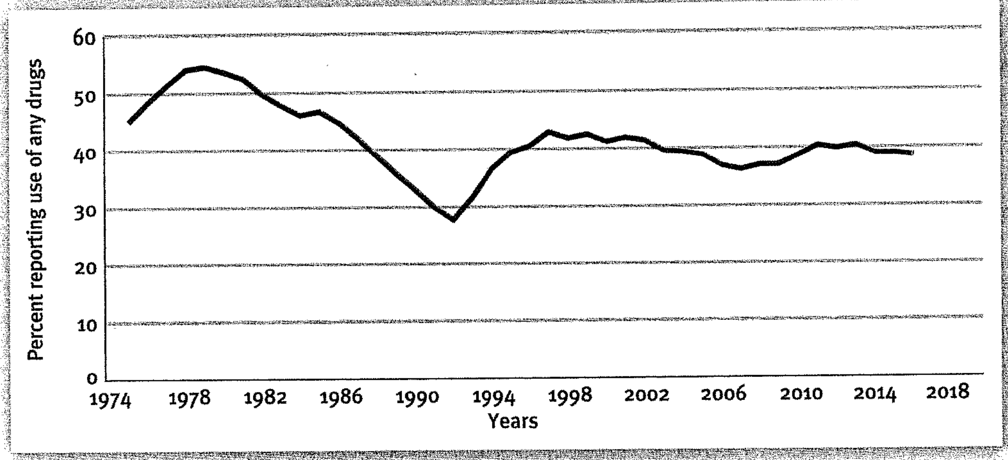


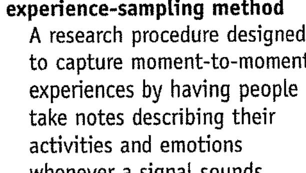
Figure 9.2: Trends in prevalence of illicit drug use, reported by U.S. high school seniors from the mid-1970s to 2017 Contrary to our stereotypes, in recent years, only 2 in 5 U.S. high school seniors reported using any illicit drugs (including alcohol). Notice also that drug use was somewhat more common during the late 1970s and early 1980s—among the parents of today's teens, during their own adolescence.

Data from CDC, 2020e; Johnston and others, 2016

Are Adolescents More Emotional, More Emotionally Disturbed, or Both?

Given this information, it's no surprise that the third major storm-and-stress stereotype is correct: Adolescents are more emotionally intense than adults. Developmentalists could not reach this conclusion by using surveys in which they asked young people to reflect on how they *generally* felt. They needed to chart the minute-to-minute ups and downs of teenagers' emotional lives.

Imagine that you could get inside the head of a 16-year-old going about daily life. About 40 years ago, Mihaly Csikszentmihalyi and Reed Larson (1984) accomplished this feat by devising a procedure called the **experience-sampling method.** The researchers asked students at a suburban Chicago high school to carry pagers programmed to emit a signal at random intervals during each day for a week. When the beeper went off, each teenager filled out a chart like the one shown in Figure 9.3. Notice, when you look at Greg's record, the experience-sampling procedure gives us insights into what experiences make teenagers (and people of other ages) feel joyous or distressed. Let's now look at what the charts revealed about the intensity of adolescents' moods.


experience-sampling method A research procedure designed to capture moment-to-moment experiences by having people take notes describing their activities and emotions whenever a signal sounds.

The records showed that adolescents *do* live life on an intense emotional plane. Teenagers reported experiencing euphoria and deep unhappiness far more often than did a comparison sample of adults. Teenagers had more roller-coaster shifts in moods. While a 16-year-old was more likely to be back to normal 45 minutes

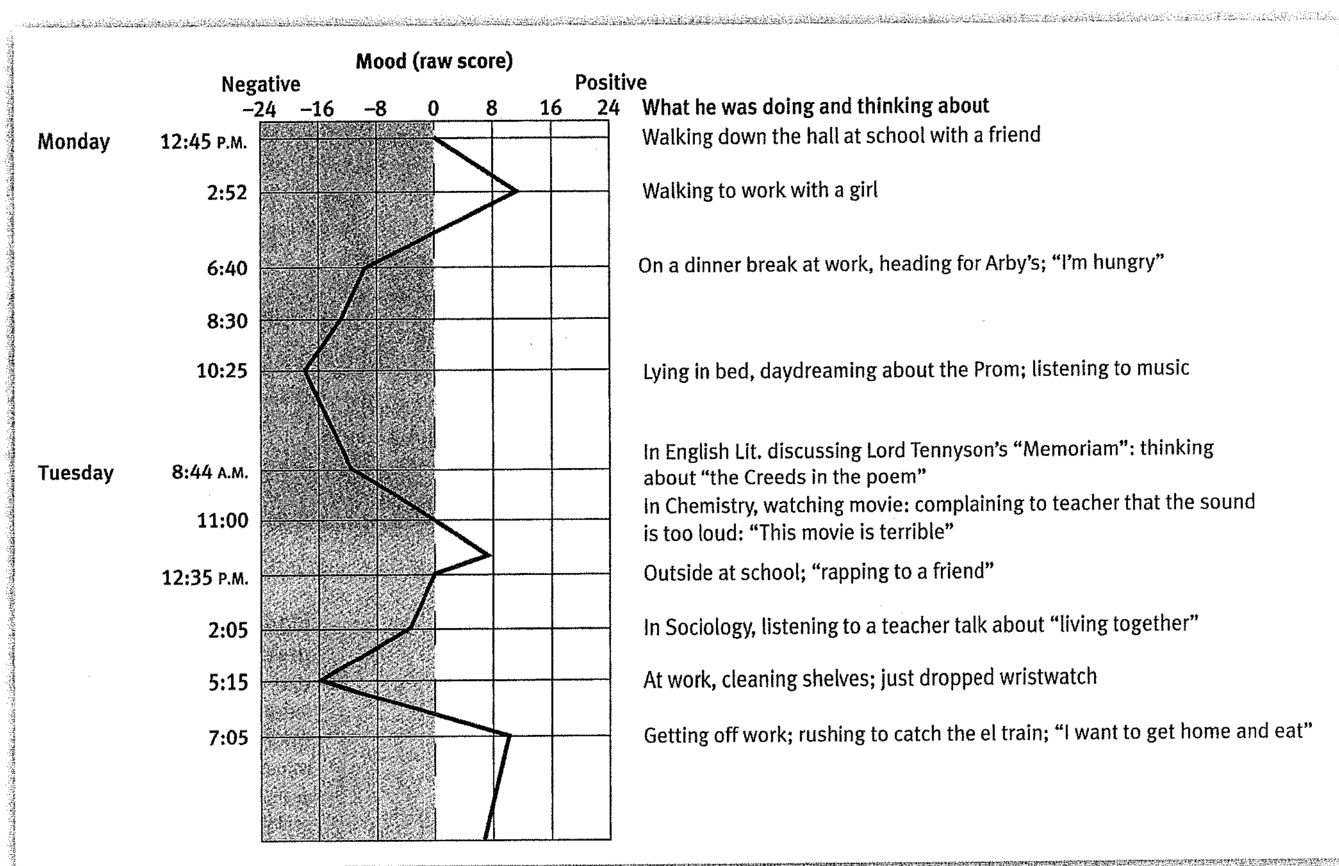


Figure 9.3: Two days in the life of Gregory Stone: An experience-sampling record This chart is based on two days of self-reports by a teenager named Greg Stone as he was randomly beeped and asked to rate his moods and what he was doing at that moment. By looking at Greg's mood swings, can you identify the kinds of activities that he really enjoys or dislikes? Now, as an exercise, you might want to monitor your own moods for a few days and see how they change in response to your own experiences. What insights does your mental checklist reveal about the activities you most enjoy?

Data from Csikszentmihalyi & Larson, 1984, p. 11

after feeling terrific, an adult was apt to still feel happier hours after reporting an emotional high.

Does this mean that adolescents' moods are irrational? The researchers concluded that the answer was no. As Greg's experience-sampling chart reveals, teenagers don't get delighted or dispirited for no reason. It's hanging out with their friends that makes them feel elated. It's a boring class that bores them very, very much.

Does this mean that *most* adolescents are emotionally disturbed? The answer here is *definitely* no. Although the distinction can escape parents if their child wails, "I got a D on my chemistry test! I'm the dumbest person in the world!" there is a difference between being *emotional* and being emotionally disturbed.

Actually, when developmentalists ask teenagers to step back and evaluate their lives, they get an upbeat picture of how young people generally feel. In one mammoth poll, half a million 15-year-olds worldwide ranked their overall happiness well above the mean, scoring more than 7 on a scale from 1 to 10. Nine out of 10 teens agreed that their parents were nurturing forces in their lives (Organisation for Economic Co-operation and Development, 2017).

So the stereotype that most teenagers are alienated from their families and suffer from emotional problems is false. Still, the picture is far from rosy. As Figure 9.4 shows, when people reach their 20s, illegal acts often ascend to a peak (Duell and others, 2019).

Worse yet, although only a miniscule number of teens commit suicide, in a recent U.S. poll almost 1 in 6 U.S. teens said they had considered taking their own lives (CDC, 2020f).

Nonsuicidal self-injury, cutting or mutilating one's body, is far from rare. Roughly 1 in 12 U.S. teenagers self-mutilates (Buelens and others, 2020). In a Belgian college survey, cutting rates were as high as 1 in 10 (Kiekens and others, 2019).

nonsuicidal self-injury Acts of self-mutilation, such as cutting or burning one's body, to cope with stress.

What provokes the impulse to injure oneself? Studies suggest self-mutilation functions as a frantic mechanism to relieve emotional pain (Kiekens and others, 2020; Taliaferro and others, 2019; Tan, Tam, & Bonn, 2019). "It's due to pure black hatred of the self that has failed at everything else," said one boy (quoted in Breen, Lewis, & Sutherland, 2013, p. 59). Bullying increases this lure, both for victims (Tilton-Weaver, Marshall, & Svensson, 2019) and perpetrators of relationally aggressive acts (Esposito,

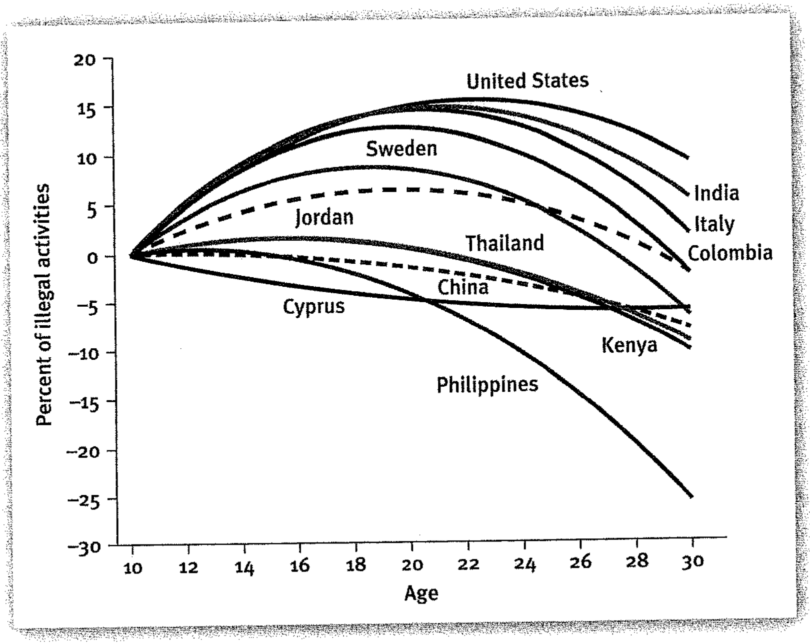


Figure 9.4: Age patterns in illegal activities in selected nations When researchers asked teens and emerging adults in countries around the world to report on activities such as stealing, fighting, and vandalizing, notice that law-breaking often peaked around age 21, and then slowly declined.

Information from Duell and others, 2019

National Suicide Prevention Lifeline

Although thoughts of suicide are far from rare during the teenage years, thankfully, the fraction of teens who take their own lives is miniscule, possibly in part due to the heroic efforts of organizations such as the one featured in this poster.

Bacchini, & Affuso, 2019). But, rather than signaling the desire to end one's life, self-mutilation seems to be a strategy for *preserving* a solid sense of self: As one child reported, "I love looking at my scars. They are an important part of me . . ." (p. 60).

Given that thoughts of suicide and self-mutilation do erupt, does the prevalence of depression accelerate during the teenage years?

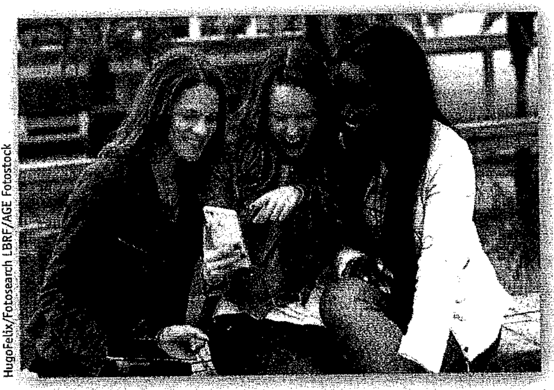
Unfortunately, the answer is yes. Moreover, while the frequency of this mental disorder is about equal for each gender during childhood, after puberty, the adult pattern kicks in (Copeland and others, 2021). Women are roughly twice as susceptible to depression as men (Dorn and others, 2019). And, in recent years, as I suggested in Chapter 1, teenage depression has become more common in girls (see Twenge and others, 2019; Twenge, 2020a). In 2017, 1 out of every 5 female adolescents reported experiencing a major depressive episode during the past year (Geiger & Davis, 2019). So, while they are worried about their acting-out adolescent sons, parents might be concerned about their depressed daughters, too.

Why are depression rates rising? One culprit, a prominent researcher suggests, is social media, for making the push to be popular a 24/7 pursuit (Twenge, 2019a, 2019b). ("Why do all my friends have Snapstreaks with each other, but no one wants to Snap with me?"). In fact, popularity pressures are to blame for *many* problems during the early teens.

Trending in Developmental Science: A Pubertal Problem — Popularity

The passion to be popular helps explain the typical middle-school nosedive in grades (Ferguson & Ryan, 2019) because, at this age, it can be "cool" to rebel. Therefore, rising in the pre-teen popularity ranks has academic costs (Gremmen and others, 2017). Young teens may face a difficult choice: "Either be in the 'in crowd' or care about school" (Blakely-McClure & Ostrov, 2016).

Being in the in crowd has moral costs. Relational aggression, as I described in Chapter 6, helps propel pre-teens into the popular group (Casper, Card, & Barlow, 2020; Kiefer & Wang, 2016). So children who triumph in the popularity wars become skilled at this "mean girls and boys" mode of relating (Dumas, Davis, & Ellis, 2019; van den Berg, Burk, & Cillessen, 2019; Zhang, Liu, & Zhang, 2020). Teens who are passionate to be popular, but unsuccessful at that quest, are prime targets for being bullied and depressed (Breslend and others, 2018).



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Being in the elite "in crowd" at school should be a thrilling experience for teen girls. But they may develop some not-so-nice qualities as the price of being at the top of the class status rungs, and, surprisingly, as I suggest in the text, they are probably *more* insecure than their less popular peers!

Ironically, both *succeeding* and failing at being popular makes children feel socially insecure. Researchers asked middle schoolers, "Who are the popular and best-liked kids in class?" Then, they related these rankings to children's social self-esteem. Surprisingly, pre-teens at the top of the popularity pole were unusually socially anxious — perhaps because they felt so vulnerable to being toppled from that exalted perch. If you want to feel best about yourself and your relationships, this study suggests, it's best to be in the *middle* of the social hierarchy in class (Ferguson & Ryan, 2019)!

Are medium-status kids content because they care less about being popular — and so perhaps have wider, more varied interests in life than their peers? This tantalizing possibility brings me to that important question: Who *exactly* gets derailed as a teen, and who thrives?

Which Teens Get Seriously Derailed?

Without denying that serious adolescent difficulties can unpredictably erupt, here are two thunderclouds that foreshadow teenage troubles ahead.

At-Risk Teens Tend to Have Prior Emotion Regulation Problems

It should come as no surprise that one thundercloud relates to *externalizing* tendencies (DeMatteo, Wolbransky, & LaDuke, 2016). Not only is the lure to get into trouble overwhelming when children have problems regulating their behavior, but if boys and girls are rejected by the mainstream kids, they may gravitate to deviant, acting-out friends (more about this later).

Therefore, tests of *executive functions* — measures that chart whether girls and boys have difficulty regulating their behavior — strongly predict adolescent storms (Winsper, Bilgin, & Wolke, 2020). Having a history of excessive physical aggression forecasts hurricane-force winds. Does this boy regularly get involved in fights? Is this girl lacking empathy and guilt? Serious elementary school externalizing behaviors can foreshadow criminal behavior as a teen (Simmons and others, 2018).

At-Risk Teens Grow Up in an Erratic, Hostile Milieu

Living in a harsh, unpredictable environment multiplies this risk (Lu & Chang, 2019). Does this child have rejecting, non-authoritative parents (Lansford, 2019; Rothenberg and others, 2020)? Is this person growing up in an unsafe, low-efficacy community (Deater-Deckard and others, 2019; Simmons and others, 2018)? Again, as I suggested in Chapters 4 and 7, no child (or adult) can flourish bereft of caring attachments. We all need a nurturing community to thrive.

adolescence-limited turmoil Antisocial behavior that, for most teens, is specific to adolescence and does not persist into adult life.

life-course difficulties Antisocial behavior that, for a fraction of adolescents, persists into adult life.

Which Teens Thrive?

> At about age 15, I got involved in my church youth group. My pastor became my mentor. By taking me under her wing, she encouraged my love of music. My teenage years were the best time of my life.

As this quote shows, teenagers thrive when adults nurture their talents. They flourish when neighborhood institutions support their strengths (more about this later). As children leave the family orbit, finding a mentor or VIP (very important non-parental adult) can be crucial (Futch Ehrlich and others, 2016) — a caring adult who is not a relative and pushes a young person to succeed. Mentors who foster racial pride, no matter what their ethnicity, help teenagers of color thrive (Sánchez and others, 2019; Wittrup and others, 2019).

Thriving does not mean staying out of trouble. Many adolescents who are flourishing also engage in considerable risk-taking during their early and middle teens. Therefore, testing the limits is a *typical* adolescent experience even among the happiest, healthiest teens (Larson & Grisso, 2016).

And let's not give up on children who *do* get seriously derailed. Developmentalists make a distinction between **adolescence-limited turmoil** (antisocial behavior during the teenage years) and **life-course difficulties** (antisocial behaviors that continue into adult life) (Moffitt, 1993). Perhaps you have a friend who used to regularly take drugs or get into trouble with the law, but later became a responsible adult. The Experiencing the Lifespan box, as you will see later, shows that even the most troubled teens can flourish if they are fortunate to find caring adults.

Hill Street Studios/DigitalVision/Blend Images/Getty Images

Suppose this 16-year-old chess whiz didn't have a mentor to nurture his passion. He would probably never have had a chance to express his talent and flourish during his teenage years.

Table 9.5: Predicting Whether a Child Is Prone to Teenage Storms or Sunny Skies: A Section Summary Checklist
Threatening Thunderclouds
1. Does this child have emotion-regulation difficulties? Is this person low in empathy and involved in regular fights?
2. Is this child exposed to harsh, non-authoritative parenting?
3. Is this child being raised in a dangerous, low-collective efficacy neighborhood?
Sunny Signs
1. Does this child have a special talent and an adult mentor who appreciates their gifts?
2. Are there nurturing places in the community where this teen can go after school?

Table 9.5 offers a checklist so you can evaluate whether a child you love might have a stormy or sunny adolescence.

Wrapping Things Up: The Blossoming Teenage Brain

Now let's pull it all together: the mental growth, the morality, the emotionality, the sensitivity to what others think. Give teenagers an abstract intellectual problem such as Kohlberg's moral questions, and they reason in mature ways. But teens tend to be captivated by popularity and get overwhelmed in arousing situations when they are with their friends.

According to Laurence Steinberg (2016), these qualities make sense when we look at the developing brain. Puberty heightens the output of certain neurotransmitters, which provokes the passion to take risks. At the same time, the insulating *myelin sheath* continues to grow until our twenties (see Table 9.6). As Steinberg explains, it's like starting the engine of adulthood with an unskilled driver. This heightened activation of the "socioemotional brain," with a frontal lobe control center still "under construction," makes adolescence a potentially dangerous time.

Table 9.6: Teenage Brain-Imaging Questions and Findings
Question #1: How does the brain change during adolescence?
Answer: *Dramatically, in different ways.* Frontal lobe gray matter (neurons and synapses) peaks right before puberty and then gradually declines due to pruning—that is, the cortex "gets thinner" over the teenage years. In contrast, white matter (the myelin sheath) continues growing into the twenties.
Question #2: Are there sex differences in brain development?
Answer: *Yes.* Because girls reach puberty earlier, they are on a faster brain-development timetable than boys; their gray matter peaks at a younger age (10 for girls and 12 for boys), and white matter increases at an accelerated pace in the female brain. Do these sex differences explain why teenage boys are far more likely to get into trouble with the law? Many researchers believe the answer is yes.
Question #3: Do pubertal brain changes predict teenage distress?
Answer: *Possibly yes.* In one study, researchers tied later depression diagnoses—in both teenage girls and boys—to premature frontal lobe thinning. Other research relates this emotional disorder to blunted reward regions of the cortex. Still, meta-analyses exploring how pubertal differences in specific brain regions relate to risk-taking, depression, and sex differences provide inconsistent, confusing results.
Conclusion: While we do have good general data on teenage brain development, we still have far to go in neuroscientifically mapping the teenage mind.
Information from Bava and others, 2010; Bjork & Pardini, 2015; Dai & Scherf, 2019; Goddings and others, 2019; Herting & Sowell, 2017; Koolschijn & Crone, 2013; Lenroot & Giedd, 2010; Luciana, 2010; Moreno & Trainor, 2013; Negriff and others, 2011; Shulman and others, 2015; Toenders and others, 2019; Vijayakumar and others, 2020).

Table 9.7: Tips for Parents of Teens

1. Understand that strong emotions may not have the same meaning for your teen as for you. So try not to take comments like "I hate myself" or "I'm the dumbest person in the world" very seriously. Also, just because your teen gets furious at you doesn't mean she doesn't love you.
2. Understand that sampling forbidden activities is typical, and perhaps cut your teen a bit of slack. But if your child is involved in genuinely illegal activities or seems seriously depressed, you do need to be concerned.
3. Understand that striving to be in the "popular crowd"—while typical—has unpleasant consequences. Bring home the message that "being popular is not important." Encourage your child's passions in other areas of life.
4. Connect your son or daughter with a mentor outside of the family, if possible!

This "maturity gap" between the emotional and "rational" brain appears in young people around the world (Icenogle and others, 2019). But from an evolutionary standpoint, beginning adolescence with an accelerating emotional engine makes sense. Teenagers' risk-taking tendencies propel them into the world. Their passion to bond with their peers is vital to leaving their parents and forming new attachments as adults (Duell & Steinberg, 2019). The teenage brain is beautifully tailored to help young people make the leap from childhood to adult life.

Table 9.7 summarizes these messages in a chart for parents. Now it's time to explore the ramifications for society.

INTERVENTION Making the World Fit the Teenage Mind

How can we fit the wider world to the teenage brain? Here are three suggestions:

Don't punish adolescents as if they were mentally just like adults. Since the adolescent brain is a work in progress, it doesn't make sense to have the same legal sanctions for teenagers who commit crimes that we have for adults. Rather than locking adolescents up, it seems logical that at this young age the focus should be on rehabilitation. As Steinberg (2016; Shulman & Steinberg, 2016) and virtually every other adolescence expert suggests, with regard to the legal system, "less guilty by reason of adolescence" is the way to go.

Is the U.S. legal system listening to the adolescence specialists? The answer is "a bit." In 2005, the Supreme Court outlawed the death penalty for adolescents and, in 2012, eliminated life sentences without the possibility of parole for teens (Heilbrun, DeMatteo, & Goldstein, 2016).

Still, today, as the Experiencing the Lifespan box suggests, judges and prosecutors can decide to transfer some children as young as age 13 (!) out of the juvenile justice system and try them as adults (Larson & Grisso, 2016). Yes, as my amazing interview with Jason suggests, with luck and a resilient temperament, a shockingly punitive approach *can* help turn a person around.

Experiencing the Lifespan Innocently Imprisoned at 16

If you think the U.S. legal system protects 16-year-olds from adult jail and that citizens can't be falsely incarcerated without a trial, think again. Then, after reading Jason's story, you might link his horrific teenage years to the qualities involved in resilience (discussed in Chapter 7).

(Continued)

I grew up with crazy stuff. My mom was a drug dealer and my dad passed away, so I was adopted by my grandparents. I was kicked out of four schools before ninth grade. By age 15, I was involved with a street gang and heavy gun trading in Birmingham, Alabama. I was in a car with some older guys during a drive-by shooting, got pulled over, and that was the last time I saw daylight for over 3 years.

The original charge was carrying a concealed weapon, and I was sent to a juvenile boot camp. Then, two days after being discharged, detectives were knocking on my door with the full charges: three counts of attempted murder. The arresting officers decided to transfer me to county jail, where I ended up for 19 months. If you go to trial and lose, you get the maximum sentence, 20 years to life, so—even though I was innocent—avoiding trial is the thing you want to do. What happens is that your lawyers keep negotiating plea bargains. First, I was offered 20 to life, with the idea I'd be out in 10 years; then 15 years, then 10. Not very appealing for a 16-year-old kid!

Finally, by incredible good luck, I got a lawyer who takes kids from prisons and puts them into rehab facilities, and he convinced the judge that was best for me. I quickly had to take what they offered—being sent to the Nashville Rescue Mission and then a halfway house for 2 years—because my trial date was coming up very soon.

Jail was unbelievable. The ninth floor of the Jefferson County Jail is well known because that's where they send criminals from the penitentiary who have committed the most violent crimes to await trial. My first cellmate had cut a guy's head off. Every time you get to know a group, the next week another group arrives in jail and you have to fight them. The guards were no better. If they didn't like a prisoner, they would persuade inmates to beat the living daylights out of that person.

What helped me cope were my dreams, because you are not in jail in your dreams. I wrote constantly, read all the time. What ultimately helped was being sent out of state (so I couldn't get involved with my old friends) and, especially, my counselors at the mission. I never met guys so humble, such amazing people. Also, if I got into trouble again, I knew where I could be heading. Scared the heck out of me. Now, everything I do is dependent on being normal. I'm 22. I have good friends, but I haven't told anyone anything about my past. I have a 3.5 average. I'm working two jobs. I'll be the first person in my family to graduate college. I want to go to grad school to get my psychology Ph.D.

Jason's story, however, is an exception. Scientific data prove that criminal justice system encounters can *promote* criminal acts.

Steinberg's research team (Beardslee and others, 2019) polled adolescents about their illegal activities and followed them over the next few years. Contrary to the hardcore law-and-order position, being caught by law enforcement and then let go ("He just got a slap on the wrist") *did* deter future deviant acts. But boys who were sent to court were more likely to commit further crimes.

The findings are especially disturbing for male teenagers of color: Researchers tracked Black boys, cataloguing their police stops and antisocial behavior over a year and a half. Each encounter with law enforcement *in itself* predicted more delinquency. And being picked up by the police was just as likely, *whether or not a boy had committed an illegal act.* Therefore, by assuming teenagers of color commit crimes, law enforcement may inadvertently be socializing boys to be lawless, even when they start out innocent of illegal acts (Del Toro and others, 2019)!

Create community programs that capitalize on teenagers' strengths. Given that our main adult disciplinary institution—the criminal justice system—may work against adolescent health, we need places that allow teens to explore their passions in positive ways.

youth development program Any after-school program or structured activity outside of the school day that is devoted to promoting teenagers to flourish.

Youth development programs fulfill this mission. They give adolescents a safe place to explore their interests during the unstructured late afternoon hours, when teens are most prone to get into trouble while hanging out with friends (Hoeben and others, 2016). From 4-H clubs to church groups to high school plays, youth development programs ideally foster qualities that developmentalist Richard Lerner has named the five C's: *competence, confidence, character, caring,* and *connections.* They provide an environment that allows young people to thrive (Lerner and others, 2016; Tolan, 2016).

I wish I could say that every youth program fostered flourishing. But as anyone who has spent time in after-school clubs knows, these settings can sometimes encourage bullying and antisocial acts (Rorie and others, 2011). So youth development

programs must be well structured and supervised. They have to promote the five C's. And, since these activities are voluntary and so tend to be utilized by teenagers who are already coping well, they don't help the very at-risk boys and girls most in need (Ciocanel and others, 2017). Therefore, to really alter the adolescent experience, it's best to change the place that is the focal point of *every* teenager's life: school.

Change high schools to provide a better adolescent–environment fit. Adolescents who feel embedded in nurturing schools tend to feel good about themselves (Hirschfield & Gasper, 2011; Lewis and others, 2011), the world (Flanagan & Stout, 2010), and their future (Shubert, Wray-Lake, & McKay, 2020). Excellent high schools can offer at-risk teens a vital haven when they are having problems at home (Loukas, Roalson, & Herrera, 2010).

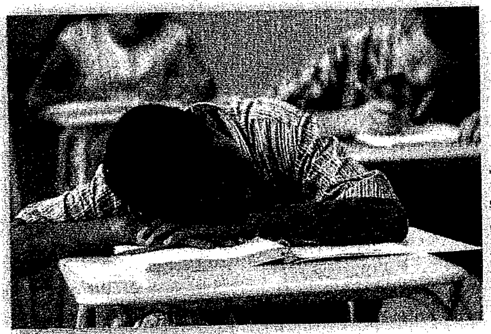
Unfortunately, however, in one disheartening international poll, although teenagers were generally upbeat about other aspects of their lives, they rated their high school experience as only "so-so" (Gilman and others, 2008). How can we turn this situation around?

In surveys, teenagers say that they are yearning for the experiences that characterize high-quality elementary schools (described in Chapter 7) — autonomy, work that encourages them to think, teachers who respect their abilities (LaRusso, Romer, & Selman, 2008), hands-on courses that are relevant to their lives (Wagner, 2000). Service-learning classes in particular can make an enduring impact on development (McIntosh, Metz, & Youniss, 2005). Here is what one young man had to say about volunteering at a soup kitchen: "I was on the brink of becoming one of those hoodlums the world so fears. This class was one of the major factors in my choosing the right path" (quoted in Yates & Youniss, 1998, p. 509).

zero-tolerance policies The practice in U.S. public high schools of suspending students after one rule infraction.

school-to-prison pipeline Term referring to the way school expulsion may provoke criminal behavior and incarceration for at-risk teens.

We also should rethink the school day to take into account teenagers' unique sleep requirements. During early adolescence, the sleep cycle is biologically pushed back. On school nights, because children naturally go to bed later, the typical eighth grader loses almost half an hour of sleep. Three out of four teens get less than the required 8 hours of sleep per night (Baiden, Tadeo, & Peters, 2019). Worse yet, children who strongly show this sleep deficit are *generally* at risk for a stormy teenage life. They tend to have poorer family relationships (Díaz-Morales and others, 2014) and are at elevated risk of becoming depressed (Goldstone and others, 2020).



Jose Luis Pelaez Inc/Getty Images

Could this have been you in high school, particularly toward the end of the week? Have we made a mistake by insisting that the traditional school day start at 8 A.M.? Perhaps to promote a better adolescent–environment fit, we should preserve our pandemic approach of having students spend some school days online.

Because sleep deprivation throws the cognitive and emotional systems out of whack, these adolescents are apt to be impulsive (Peach & Gaultney, 2013) and engage in deviant acts (Telzer, Fuligni, and others, 2013), in addition to (no surprise) doing poorly in class. Therefore, if schools adopt a post–COVID hybrid model, in which students learn online at least part-time, this change may boost teenagers' mental health (see Twenge, 2020a, and my Final Thoughts section)!

Finally, it's past time to rethink **zero-tolerance policies**, high school rules mandating immediate suspension for any deviant act. This U.S. practice, which exploded during the 1990s, had laudable goals: protecting classmates from violent peers, deterring later criminal acting out. But, just like getting in trouble with the police, being suspended from school *encourages* later delinquency. Schools that take a hard-core zero-tolerance approach make every student feel less connected to their teachers and classes (Daly and others, 2016).

Being expelled, sometimes for minor infractions like smoking on school grounds, pathologizes typical teenage behavior. It prevents the most vulnerable teens from getting the caring non-parental mentoring experiences they crave. What developmentalists evocatively call the **school-to-prison pipeline** — meaning the transition from adolescence-limited turmoil to life-course criminal behavior — can be set in motion when at-risk, frequently male, and often non-White teenagers are barred from the classroom doors (Daly and others, 2016). ■

Developmental Psychology Videos

Risk-Taking in Adolescence

In this video, you will explore how risk-taking relates to the school-to-prison pipeline and overall teen well-being.

Achieve

Trending in Developmental Science: Rooting Out School Racism

> When I read the end-of-semester papers, I realized this student was a brilliant writer. But when I called out his name, the split-second of shock on my face ("I can't believe *he* wrote this!") turned his happiness into disgust. My student was the only Black male in class—and I had just implicitly signaled, "Boys like you can't be that smart!"
>
> **(from a discussion with a professor colleague of mine)**

How often do African American young people endure these inadvertent racial put-downs? Almost daily, according to one Internet poll. Black teenage boys were asked to share personal examples of racist experiences during a two-week period and then questioned about their emotional states. Denigrating experiences, they reported, happened on average more than five times a week. And even passing slights can sting. Teens subjected to these incidents became temporarily depressed (English and others, 2020).

Racial slurs vary, from more minor microaggressions like the one I described above, to the trauma of being arrested for walking down the street. But minimizing African American academic competence has specific power to dampen a child's motivation at school (Gale & Dorsey, 2020; Wittrup and others, 2019). What gives Black teens the courage to efficaciously persist?

Having a strong positive racial identity. The main shield is an armor a child carries inside. When teenagers are proud of their ethnic identity, no matter what happens in class, academic self-efficacy endures (Butler-Barnes and others, 2020; Moses, Villodas, & Villodas, 2020). And maybe later that day or even the next week, that brilliant Black student resolved, "What my teacher thinks doesn't matter. I'm going to work harder, because I owe it to myself and people like me to *prove* that people like her are wrong."

Having a school that embraces your identity. Still, courage can't happen in a vacuum. Children of color should attend high schools that accept their inner selves. Administrative policies that discriminate against natural hairstyles and pull teenagers from class for dress-code infractions are implicitly saying, "This place doesn't respect who you are" (Gray, Hope, & Matthews, 2018). Zero-tolerance policies, designed to promote security, as I've highlighted, make *every* student insecure. Schools should demonstrate that they welcome diversity. And it's best to spell out that commitment upfront.

In one creative study, researchers scoured the mission statements of Chicago middle schools. Typically, websites boasted uplifting comments such as, "We encourage student curiosity and a desire to learn." But a certain subset included statements such as, "We foster a global community" or "We prepare students to live in a multicultural world."

Mentioning diversity made no difference if a student was not Black. But, even controlling for features like class size, racial/ethnic makeup, and scores on standardized tests, schools highlighting diversity had Black eighth graders with fewer risk factors for diabetes and cardiac disease than other city schools (Levine and others, 2019).

In sum, while the details differ, the message is the same. Students of *every* ethnic group thrive physically and intellectually at schools that foster relatedness and autonomy (recall my discussion in Chapter 7). For low-income teens, one study showed the best predictor of attending college is identical for both children of color and White teens: It's liking your teachers and school (Minor & Benner, 2018)!

Table 9.8 offers summary points based on this section, specifically for parents and adolescents of color.

Table 9.8: Will This High School Value My Ethnic Heritage? Five Summary Questions to Ask

1. Does the school's mission statement mention diversity?
2. Does this school teach the contributions of every ethnicity and race?
3. Does this school permit teens to dress and do their hair the way they want (within limits)?
4. Are zero-tolerance practices anathema at this school?
5. And (of course) are courses at this school challenging and fulfilling? Do teachers believe every child can succeed?

Now that we've explored teenagers' inner lives, let's explore their shifting social world.

Tying It All Together

1. Katarina, a teacher, is about to transfer from fourth grade to the local high school, and she is excited by all the things that her older students will be able to do. Based on what you have learned about Piaget's formal operational stage and Kohlberg's theory of moral reasoning, pick which *two new* capacities Katarina is apt to find among her students.
   a. The high schoolers will be able to memorize poems.
   b. The high schoolers will be able to summarize the plots of stories.
   c. The high schoolers will be able to debate different ideas even if they don't personally agree with them.
   d. The high schoolers will be able to develop their own moral principles.
2. Eric is a basketball coach. The year-end tournament is tomorrow, and the star forward has the flu and won't be able to play. Pekelo, last year's number one player, offers to fill in – even though this violates the conference rules. Eric agonizes about the ethical issue. Should he deprive his guys of their shot at the championship, or go against the regulations and put Pekelo in? How would you reason about this issue? Now, fit your responses into Kohlberg's categories of moral thought.
3. A 14-year-old worries that everyone is watching every mistake she makes; at the same time, she is fearless when her friends dare her to take life-threatening risks like bungee jumping off a cliff. According to Elkind, this feeling that everyone is watching illustrates ____________; the risk-taking is a sign of ____________; and both are evidence of the process called ____________.
4. Pick which symptom indicates your 15-year-old nephew has a genuine psychological problem: *intense mood swings and social sensitivities; depression; a tendency to engage in risky behavior with friends.*
5. Your child has made it into the popular kids' crowd at school. You should feel (pick one): *proud because that means he is able to get along with the kids; worried because he is at risk for acting-out problems, declining grades, and low self-esteem.*
6. There has been a rise in teenage crimes in your town. Which solution should you *not* support?
   a. Vigorously support law-and-order interventions, such as putting kids in jail to teach them a lesson.
   b. Work to make high schools more nurturing and responsive to adolescents' needs.
   c. Sponsor youth development programs in your community.
7. Give parents of color two tips for selecting the right school for their children.

Answers to the Tying It All Together questions can be found at the end of this chapter.

SOMETHING TO CONSIDER: Cognitive and Socioemotional Development in Adolescents: Exploring Storm and Stress Achieve

Learning Outcomes

- Outline how teenagers separate from parents and the special separation issues immigrant teens face.
- Describe cliques, crowds, and teenage peer groups.
- Explain the forces that promote delinquent peer groups, making special reference to gangs.

Social Development

What are teenager–parent interactions really like? Now it's time to tackle this question, as I focus on those twin adolescent agendas — separating from parents and connecting with peers.

Separating from Parents

> When I'm with my dad fishing, or when my family is just joking around at dinner — it's times like these when I feel completely content, loved, the best about life and myself.

In their original experience-sampling study, Csikszentmihalyi and Larson (1984) discovered that teenagers' most uplifting experiences occurred when with their families — sharing a joke around the dinner table or having a close moment with Mom or Dad. Unfortunately, however, those moments were few and far between. In fact, while peer encounters were more apt to evoke passionate highs, when adolescents were with their families, unhappy emotions outweighed positive ones 10 to 1.

This tendency to lock horns with parents seems built into the universal adolescent experience. In one global poll, teenagers ranked stress with parents as more upsetting than stress with peers (Persike & Seiffge-Krenke, 2014).

The Issue: Pushing for Autonomy

Why does family life produce such teenage pain? As developmentalists point out, if our home life is good, our family is our loving cocoon. However, in addition to being a safe haven, parents are often a source of angst. The reason is that parents' job is to love us and to limit us. When this parental limiting function gets into high gear, teenage distress becomes acute.

What do teenagers and their parents argue about? A multinational survey offered insights into how parenting agendas reflect specific cultural norms (Persike & Seiffge-Krenke, 2014; recall Chapter 7). In northern Europe and the United States, arguments around academic issues loom large ("I hate the pressure from my parents to get good grades!"). For Japanese and Chinese teens, school-related conflicts outweigh everything else. In Islamic nations, perhaps because it's expected to marry within "one's own group," micromanaging peer relationships is a major stress ("My parents won't let me see the friends I want!"). In southern Europe, as you will see in Chapter 10, where historically children have lived with their parents into their thirties, dependency and general parent–child acrimony is a serious concern ("We fight all the time!" "They won't let me grow up!").

But the main issue for teens in *every nation* centers around independence ("Why can't I do what I want? You have too many rules!"). Moreover, most clashes occur just when peer group pressures reach their peak — around the early teens (Daddis, 2011; De Goede, Branje, & Meeus, 2009).

Developmental Psychology Videos

Parenting in Adolescence

In this video, you will explore the roles of communication, support, connectedness, and control in the parent–teen relationship. Achieve

The Process: Exploring the Dance of Autonomy

Actually, parent–adolescent conflict flares up while children are in the midst of puberty (Steinberg, 2005; Steinberg & Hill, 1978). From an evolutionary perspective, the hormonal surges of puberty may propel this struggle for autonomy ("You can't tell me what to do!"), which sets in motion the dance of separation intrinsic to becoming an independent adult.

How does the dance of autonomy unfold? Based on periodically asking teens questions — such as, "Do your parents know what you do in your free time?" or "Do you tell your parents who you hang out with?" — and exploring parental rules, Canadian researchers offered a motion picture of changing parent–child relationships over the teenage years (Keijsers & Poulin, 2013).

As it turns out, children first initiate the push for independence by becoming secretive and distant in their early teens. But parents only respond by granting their children much more freedom beginning after age 15.

Why is mid- to later adolescence a crucial period of granting autonomy? The reason may be that, now, parents feel their children are more mature. By junior and senior year,

it's important to stop rebelling and to think concretely about college and a career (Malin and others, 2014).

Even the major social markers of independence at around age 16 or 17 eliminate family strain. Think about how getting your first summer job, or your driver's license, removed an important area of family conflict. You no longer had to ask your parents for every dime or rely on Mom or Dad to get around.

So the process of separating from their families makes it possible for teens to have a more harmonious family life. The delicate task for parents is to respect children's autonomy while remaining nurturing and involved (Filus and others, 2019). One mother of a teenager explained how this process should ideally evolve when she said, "I don't treat her like a young child anymore, but we're still very close. Sort of like a friendship, but not really, because I'm still in charge. She's my buddy" (quoted in Shearer, Crouter, & McHale, 2005, p. 674).

Passing a driving test and finally getting the keys to the car is a joyous late teenage transition into adult life. It's almost the developed-world equivalent of a puberty rite.

This quote brings up a telling gender difference in the parent–child intimacy dance. Boys seem to maintain their new, distant pubertal communication pattern as they travel into the late teens — not telling parents much about their activities, avoiding sharing their lives. But, after becoming more secretive and distant as young teens, girls reach out to their mothers during mid- and later adolescence to reconnect.

Figure 9.5 illustrates this striking pubertal decline in family closeness in a national U.S. longitudinal study, and how girls — but not boys — grow slightly more attached to their parents after ninth grade (Kim and others, 2015). Does this same dance of separation apply to immigrant teens from more collectivist regions of the world?

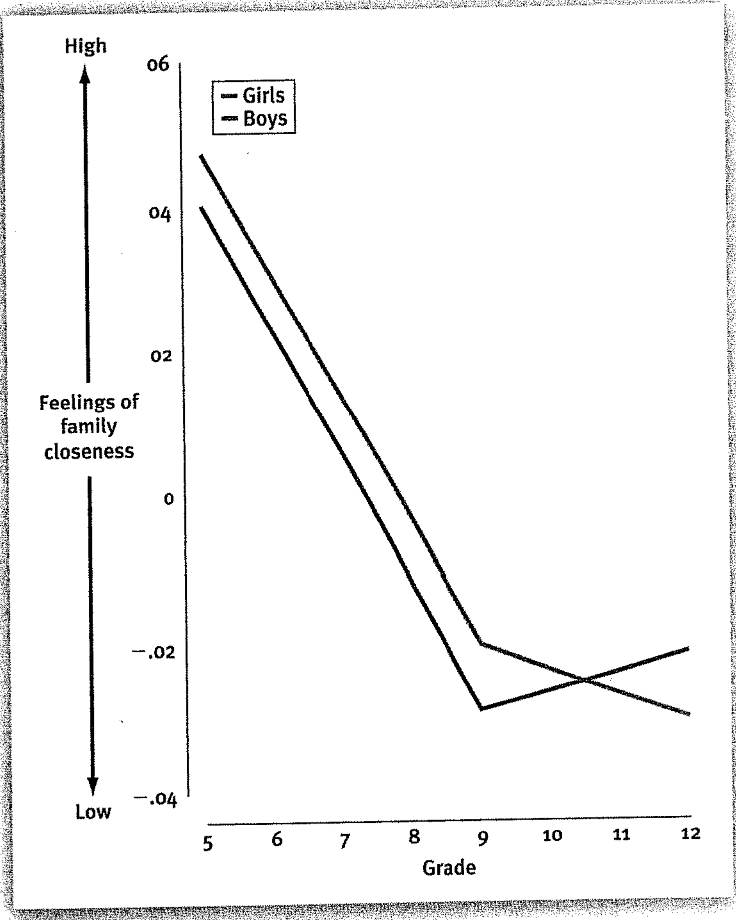


Figure 9.5: Changes in feelings of attachment to parents, reported among a sample of 4,407 children, tracked from fifth to twelfth grade In this mammoth multisite U.S. study, notice how the pre-teen dance of separation from parents explodes during middle school. Notice also how girls but not boys become slightly more attached to their parents after ninth grade.

Data from Kim and others, 2015

Cultural Variations on a Theme

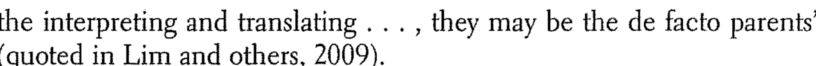
> My parents won't let me date anyone who isn't Hindu — or go to parties. They never tell me they love me. I have to be at home right after school to do the grocery shopping and take care of my parents. Why can't they just let me be a normal American kid?

In individualistic societies, we strive for parent–child adult relationships that are less hierarchical, more like friends. But, as the preceding quote suggests, cultures that have collectivist ideals have different thoughts about how teenagers should behave.

Therefore, among immigrant adolescents, the impulse to separate from one's family can provoke conflicts relating to *acculturation*. Children of first-generation immigrants may face the issue of "choosing" between their parents' values and the norms of their new home (Shenhav, Campos, & Goldberg, 2017; Wang and others, 2020). Straddling two cultures, as I described in the quote above, can upend the typical parent–child relationship, catapulting children into becoming the family adults. As one teacher who worked with Chinese immigrants commented, "The kids may be doing

AP Photo/Lincoln Journal Star, Krista Nile

As she translates an oath of naturalization to her non–English-speaking Iraqi mom, this daughter is engaging in a role reversal that may instill a lifelong sense of empathy and self-efficacy.



the interpreting and translating . . . , they may be the de facto parents" (quoted in Lim and others, 2009).

Given these strains, are immigrant teens at risk for poor parent–child relations? The answer is, "It depends." Rules that seem rigid to Western eyes have a different meaning when young people understand that their parents have sacrificed everything for their well-being (Wu & Chao, 2011). As one international poll touchingly showed, the core quality that makes adolescents feel loved *worldwide* is feeling their parents have gone out of their way to do things that are rare and emotionally hard (McNeely & Barber, 2010).

Therefore, knowing that your parents made a rare sacrifice ("giving up their happiness and moving for my future") can create unusually close parent–child bonds. Helping a non–English-speaking mother or father negotiate this unfamiliar culture can promote self-efficacy and encourage empathy, too. As one 19-year-old revealingly commented, "My entire childhood, I was translating simple things day to day . . . [It made me feel] . . . empowered, proud, frustrated at times, [but] understanding of my parents' struggle" (Guan, Greenfield, & Orellana, 2014, p. 332).

This example may partly explain why many immigrant children living in poverty often do far better in school than we might predict (Van Geel & Vedder, 2011). Despite coping with an overload of stressors, identifying with one's cultural roots and bonding in multigenerational families anchors young people more deeply in life (Telzer and others, 2016). But, like all children, immigrant teens take different paths — some flourish and others flounder. One force is critical in predicting failure or success: a teenager's group of peers.

Connecting in Groups

Go to your local mall and watch sixth and seventh graders to get a firsthand glimpse of the pre-teen passion to congregate in groups. How do peer groups change as children travel deeper into adolescence? What functions do these groups serve?

clique A small peer group composed of roughly six teenagers who have similar attitudes and who share activities.

crowd A relatively large teenage peer group.

Defining Groups by Size: Cliques and Crowds

Developmentalists classify teenage peer groups into categories. **Cliques** are intimate groups that have a membership size of about six. Your closest friends would constitute a clique. **Crowds** are larger groupings. Your crowd comprises both your best buddies and a more loose-knit set of people you get together with less regularly.

Cliques are the cozy arrangements that cement peers during elementary school. You get together for sleepovers regularly with your 3 or 4 or 5 best friends. But after moving to a different mammoth high school, teenagers need to quickly connect to a larger group.

What Is the Purpose of Crowds?

Crowds allow teenagers coping with a bewildering sea of new faces to find a compatible group home. One tip-off can be visual. Teenagers adopt a specific look — like elaborately styling their hair in rainbow hues to signal, "I'm your type of person. It's okay to be friends with me."

But, due to an *evocative* process, finding this reference group changes people for the better or worse. If children gravitate to the school "brains," their academic performance improves. (That's why parents are thrilled to say, "My child's friends are such a great influence!") And sadly, when an adolescent decides to associate with kids who are depressed, that teen gets more anxious and unhappy over time (Veed, McGinley, & Crockett, 2019). Therefore, crowds are more than anchors offering stability in a scary high school world: They offer a roadmap to adolescents' future selves.

As you pass this group on the street, you may think, "Why do they dress like that?" But for teens who adopt an in-your-face, off-beat style, the message is, "I'm different, and I don't agree with what society says." They are a signal to attract fellow minds: "I'm like you. I'm safe. I have the same ideas about the world."

Sylvain Grandadam/AGE Fotostock

What Are the Different Kinds of Crowds?

In affluent societies, there is consistency in the major crowd categories. The intellectuals (also called brains and nerds), the popular kids, the deviants, and residual subgroups (such as goths and hip hop culture) appear in high schools throughout the West (Moran and others, 2017; Sussman and others, 2007).

Although teens do straddle different groups (Lonardo and others, 2009), adolescents tend to have friends in similar status crowds. So a jock associates with the popular kids. He shuns the socially more marginal groups, such as the deviants (bad kids) or nerdy brains. Moreover, because being brainy — and, especially, advertising that you work to get high grades — can go against group norms, in many public high schools, intellectuality does not gain teenagers kudos in the peer world.

A decades-old study tracking children's self-esteem as they moved from elementary school into high school documented how being brainy was transformed from a plus to more of a teenage liability during high school (Prinstein & La Greca, 2002). The researchers found that teenagers in the high-status jock crowd reported becoming more self-confident during adolescence. (These are the people who would tell you, "I wasn't happy in elementary school, but high school was the best time of my life.") The brainy group followed the opposite path — happiest during elementary school, less self-confident as teens.

Unfortunately, boys and girls who ended up in the high school deviant peer group were unhappy in elementary school *as well as* during their adolescent years (see also Heaven, Ciarrochi, & Vialle, 2008). As I mentioned earlier, being rejected by the mainstream kids forces children to gravitate to deviant peers. Now, let's explore why joining a bad crowd makes a teenager more likely to fail.

"Bad" Crowds

The classic defense that parents give for a teenager's delinquent behavior is, "My child got involved with a bad crowd." Without ignoring the principle of selection (birds of a feather flock together), there are powerful reasons why bad crowds *do* cause teenagers to do bad things.

For one thing, as we know, teenagers are easily swayed by their peers. Moreover, each group has a leader, the person who most embodies the group's goals. So, if a child joins the brains group, his academic performance is apt to improve because everyone is jockeying for status by competing for grades (Molloy, Gest, & Rulison, 2011). However, in delinquent peer groups, members model the most antisocial leader. This most acting-out teen sets the standard for how others behave.

deviancy training Socialization of a young teenager into delinquency through conversations centered on performing antisocial acts.

Therefore, just as you felt compelled to jump into the icy water at camp when your bravest bunkmate took the plunge, if one group member begins selling guns or drugs, the rest must follow the leader or risk being called "chicken." Moreover, when children compete for status by getting into trouble, this creates ever-wilder antisocial modeling and propels the group toward increasingly risky acts.

Combine this principle with the impact of being in a group. When young people get together, a group high occurs. Talk gets louder and more outrageous. People act in ways that would be unthinkable if they were alone. From rioting at rock concerts to being in a car with your buddies during a drive-by shooting (recall the earlier Experiencing the Lifespan box), groups *do* cause people to act in dangerous ways (Cotterell, 1996).

By video-recording groups of boys, developmentalists have documented the **deviancy training**, or socialization into delinquency, that occurs by simply talking with friends in a group (Dishion, McCord, & Poulin, 1999; Rorie and others, 2011). The researchers find that at-risk pre-teens forge friendships through specific conversations: They laugh, egg one another on, and reinforce each other as they discuss committing antisocial acts. So peer interactions in early adolescence are a medium by which problem behavior gets solidified, established, and entrenched.

As a group euphoria sets in and people surge for the stage, these teenagers at a rock concert might trample one another — and then be horrified that they ever could have acted this way.

Michael Bodge/Moment/Getty Images

The lure of entering an antisocial peer group is strong for at-risk kids because they already feel like "it's me against the world." Put yourself in the place of a child whose behavior is causing him to get rejected by the "regular" kids (Ettekal & Ladd, 2015). You need to connect with other children like yourself because you have failed to gain entry anywhere else. Once in the group, your buddies reinforce your *hostile attributional bias*. Your friends tell you that it's fine to go against the system. You are finding acceptance in an unfriendly world.

In middle-class settings, popular kids sometimes get into trouble. "Self-identifying" as a jock is a risk factor for abusing alcohol, vaping, and having unprotected sex (Williams and others, 2020). (At this point, any reader who has lived through adolescence is probably saying, "Duh!") But in affluent communities, children with prior problems tend to gravitate toward the druggy or delinquent groups. In low-efficacy, economically deprived neighborhoods, there may be *no* positive peer group. Flourishing is impossible because your entire community is a toxic place. It can be difficult to survive without joining that antisocial group called a *gang*.

Society's Nightmare Crowd: Teenage Gangs

gang A close-knit, delinquent peer group. Gangs form mainly in impoverished, disorganized communities; they offer their members protection from harm and engage in a variety of criminal activities.

The **gang**, a close-knit, delinquent peer group, embodies society's worst nightmares. Gang members share a collective identity, which they express by adopting specific symbols and claiming control over a certain turf (Jennings and others, 2016). This typically male group appears in different cultures and historical eras. However, with gangs, the socioeconomic context looms large: Adverse economic conditions promote gangs (again, for a vivid example, turn back to the Experiencing the Lifespan box).

Gangs provide teenagers with status. They offer children physical protection in dangerous neighborhoods. Gangs give teenagers who are disconnected from their families the sense of belonging to a coherent (even far more caring!) group. When young people have few options for succeeding in the conventional way, gangs provide an avenue for making a living (for example, by selling drugs or stealing). So, a harsh, unfriendly environment can propel time-limited adolescent turmoil into a life-course criminal career.

This 14-year-old soldier from Sierra Leone and distraught child bride from Somalia offer a stark testament that, in some regions of the world, young people still are deprived of an adolescence.

ADAM BUTLER/AP Images

FEISAL OMAR/REUTERS/Alamy

A Note on Non-Adolescence Worldwide

These toxic influences are amplified in the most chaotic areas of the world, places where adolescence doesn't exist. There is no adolescence for the nearly 34 million children displaced from their homes in war-torn, famine-ridden regions of the globe (United Nations High Commissioner for Refugees, 2020). There is no adolescence for street children or females forced into the sex trade, or for African girls forced into unwanted marriages before age 15 (Yaya, Odusina, & Bishwajit, 2019).

Adolescence doesn't exist for thousands of child soldiers compelled to take up arms in dysfunctional civil wars. Many combatants in the poorest regions of the globe are teenage boys. Some are coerced into fighting as young as age 10 or 8 (Child Soldiers International, 2017). The sad truth is that spending a decade insulated from adult life is a luxury of living in the twenty-first-century world. Millions of children in the poorest nations still don't have a chance to be adolescents or to construct a decent adult life.

Final Thoughts: So-Called Teenage Emotional Problems in the Pre- and Post-COVID World

In this chapter, I (like many adults) have been sliding into that common pattern: giving ample attention to the emotional liabilities of the teenage years. I have neglected the reality that teenagerhood is, in some ways, the purest, most ideal life stage. Teenagerhood is when we blossom as human beings; it's when the future is before us, and we ideally have limitless potential to design

our unique adult life. And, of course, teenagers are our universal societal hope. Teenagers are our enduring human vehicle for producing a better world!

And, as a final note, a fascinating 2020 "natural experiment" suggests that many of the emotional problems adults see as *basic* to adolescence might be cured by a better person–environment fit. At the height of the first coronavirus pandemic wave (May 2020), researchers surveyed more than a thousand teens, asking questions about family time, sleep, mental health, and well-being. They were shocked to find that during this time of trauma, adolescent depression rates declined from those in previous years (see Twenge, 2020a)!

Why might this once-in-a-century human threat produce better mental health? One reason is that because they were going to school online, teenagers reported getting much more sleep. Being confined to the house also offered the luxury of more family time. Parents and children were talking more; they were eating dinner together. Standard fights such as "You don't give me the freedom I want" evaporated because families had to be physically close to keep *everyone* safe.

The researchers were also astonished to find that during this time of being physically apart, teens were spending more time personally bonding with friends. Pandemic texting rates declined in favor of video chatting and spending quality time on Zoom.

In other words, as is true of natural disasters, such as hurricanes, shared universal tragedies like pandemics (at least initially) encourage more caring, prosocial world views. They remind us of a basic human lesson: We really are all in this together as we travel through life.

And now that we have traveled through childhood and adolescence, let's explore how these life events and many, many others play out as we travel through life as adults.

Tying It All Together

1. Lindiwe and her parents are arguing again. Based on this chapter, at what age might arguments between Lindiwe and her parents be most intense? Around what age would Lindiwe's parents have begun to seriously loosen their rules? Choose between ages *12*, *16*, and *19*.
2. Mom #1 says, "Getting involved with the 'bad kids' makes teens get into trouble." Mom #2 disagrees: "It's the kid's personality that causes him to get into trouble." Mom #3 says, "You both are correct — but also partly wrong. The kid's personality causes him to gravitate toward the 'bad kids,' and then that peer group encourages antisocial acts." Which mother is right?
3. You want to intervene to help prevent at-risk pre-teens from becoming delinquents. First, devise a checklist to assess who might be appropriate for your program. Then, applying the principles in this chapter, offer suggestions for how you would turn potentially "troublemaking teens" around.

Answers to the Tying It All Together questions can be found at the end of this chapter.

SUMMARY

Cognitive and Emotional Development: The Mysterious Teenage Mind

Wise observers have described the "hot-headed" qualities of youth for millennia. However, adolescence, first identified by G. Stanley Hall in the early 1900s and characterized by **storm and stress**, became a life stage in the United States during the twentieth century, when high school became universal and brought teens together as a group.

Jean Piaget believes that when teenagers reach the **formal operational stage**, they can think abstractly about hypothetical possibilities and reason scientifically. Most adults never reason like scientists, but older teenagers use the skills involved in formal operations to plan their futures.

According to Lawrence Kohlberg, reaching formal operations allows teenagers to develop moral values that guide their lives. By examining how they reason about ethical dilemmas, Kohlberg classified moral development as either **preconventional** (moral

judgment in which only punishment and reward are important); **conventional** (moral judgment based on obeying social norms); or **postconventional** (the highest level of moral reasoning, based on having one's own moral ideals, apart from society's rules). Although Kohlberg's theory has serious flaws, children become attuned to society's injustices during adolescence.

David Elkind argued that this ability to evaluate the adult world produces **adolescent egocentrism**. The **imaginary audience** (the feeling that everyone is watching everything you do) and the **personal fable** (feeling invincible and unique) are two components of this intense early-teenage sensitivity to what others think.

Many storm-and-stress stereotypes about teenagerhood are true. Adolescents are highly socially sensitive. In arousing peer situations, they take dangerous risks. This risk-taking (and sometimes law-breaking) tendency, especially with friends, makes adolescence a dangerous time. Research using the **experience-sampling method** shows teens are more emotionally intense than adults. Contrary to our stereotypes, however, most adolescents are happy. Still, **nonsuicidal self-injury** is not infrequent, and depression rates rise during adolescence—especially among females. The push to be popular explains many unfortunate behaviors during the pubertal years.

The minority of teenagers who get into *serious* trouble tend to have prior acting-out problems and live in a low-efficacy, uncaring milieu. Having specific talents, and being connected to caring mentors, helps teens thrive. However, even well-adjusted teenagers experiment with forbidden activities, and serious **adolescence-limited turmoil** doesn't always lead to **life-course difficulties.** Many problem teens construct fulfilling adult lives.

The unique characteristics of the teenage brain make adolescence a relatively dangerous life stage. The frontal lobes are still maturing. Puberty heightens teenagers' social sensitivities and emotional states. The lessons for society are: (1) Don't punish teenagers who break the law in the same ways that adult offenders are punished; (2) channel teenage passions in a positive way through high-quality **youth development programs**; (3) make high schools more appealing, and rethink punitive **zero-tolerance policies** that promote the **school-to-prison pipeline.** Adjust the school day to fit adolescent sleep.

Unfortunately, boys of color face special hurdles during adolescence. Being picked up by the police when innocent of crimes raises the risk of committing antisocial acts. Racist comments are fairly routine. Although school-based racism can impair the desire to academically persist, ethnic pride and attending a school that prizes diversity helps Black teens succeed.

Social Development

Teenagers' struggles with parents are most intense during puberty, and issues relating to independence loom large in these conflicts around the world (with cultural variations). After young teens distance themselves from their families, by mid- and later adolescence, parents respond by relaxing their rules. Eventually, young people (especially girls) develop a more friend-like relationship with their parents. Immigrant adolescents face unique stresses, but caring for a non–English-speaking mother or father can make teens self-confident, empathic, and mature.

Cliques are the small groups of best friends children have during elementary school. **Crowds** are larger groups that give teenagers an easy way to find people like themselves after making the transition to high school. High schools have defined crowds, and children become more "like themselves" by selecting their unique group, such as nerds, jocks, etc. Children who enter delinquent groups tend to be unhappy before high school and remain distressed during their teenage years.

Entering a "bad" crowd promotes antisocial behavior because group members model the most antisocial leader. **Deviancy training**, in which pre-teens egg one another on by talking about doing dangerous things, leads directly to delinquency as at-risk children travel into high school. **Gangs**, mainly male teenage peer groups who engage in criminal acts, may be the only social group available in disorganized, low-efficacy communities. Worse yet, in the least developed, most chaotic regions of the world, young people may not really have an adolescence.

Despite our negative ideas about teenage storm and stress, we must keep in mind that adolescence is a terrific time of life. Some of the emotional problems we see as unique to this "coming-of-age" life stage may evaporate if society provides young people with a genuinely embracing, nurturing wider world.

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KEY TERMS

adolescence-limited turmoil, p. 263
adolescent egocentrism, p. 257
clique, p. 272
conventional thought, p. 255
crowd, p. 272
deviancy training, p. 273
experience-sampling method, p. 260
formal operational stage, p. 252
gang, p. 274
imaginary audience, p. 257
life-course difficulties, p. 263
nonsuicidal self-injury, p. 261
personal fable, p. 257
postconventional thought, p. 255
preconventional thought, p. 255
school-to-prison pipeline, p. 267
storm and stress, p. 251
youth development program, p. 266
zero-tolerance policies, p. 267

ANSWERS TO Tying It All Together QUIZZES

Cognitive and Emotional Development: The Mysterious Teenage Mind

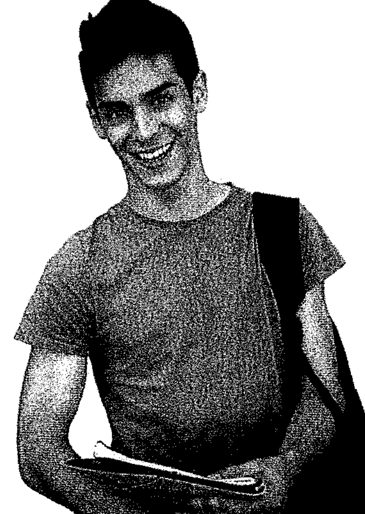
1. (c) and (d)
2. If your arguments centered on getting punished or rewarded (the coach needs to put Pekelo in because that's his best shot at winning; or the coach can't put Pekelo in because if someone finds out, he will be in trouble), you are reasoning at the preconventional level. Comments such as "going against the rules is wrong" might be classified as conventional. If you argued, "Putting Pekelo in goes against my values, no matter what the team or the rules say," your response might qualify as postconventional.
3. the imaginary audience; the personal fable; adolescent egocentrism
4. depression
5. worried, because your child is at risk for a variety of problems
6. (a)
7. Give your child a strong positive intellectual ethnic identity (to combat school-based racism) and try to send your child to a school that prizes diversity and has teachers committed to the principle that every child can succeed.

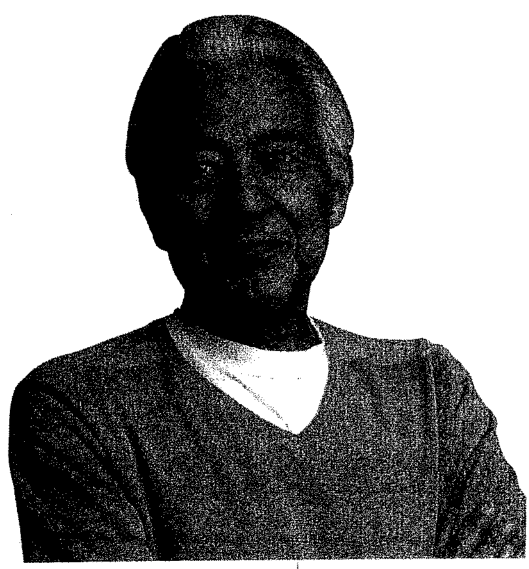
Social Development

1. At age 12, the arguments would be most intense; by age 16, Lindiwe's parents would be giving her much more freedom.
2. Mom #3 is correct.
3. Checklist: (1) Is this child unusually aggressive and does he have poor executive functions? (2) Is he being rejected by the mainstream kids? (3) Does this child have non-authoritative, rejecting parents, and does he live in a dangerous, low-efficacy community? Your possible program: Provide positive after-school activities that nurture the child's interests. Offer school service-learning opportunities. Possibly institute group sessions with parents to solve problems around certain issues, such as endemic racism. Definitely try to get the child connected with caring mentors and a different set of (prosocial) friends.

CONNECT ONLINE:

Check out our videos and additional resources located at www.macmillanlearning.com





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PART V

Luis Alvarez/Getty Images

EARLY AND MIDDLE ADULTHOOD

This three-chapter part spans the time from high school graduation until society labels us senior citizens (our sixties) — a lifespan chunk that covers almost a half-century!

Chapter 10 — Constructing an Adult Life tackles the challenges of making it to full adulthood. Here, I'll discuss leaving home, developing an identity, negotiating college, choosing a career, and finding love. This chapter concludes with an in-depth look at how social media affects the blossoming self. If you are an emerging adult, this chapter is for you!

Chapter 11 — Social Development: Relationships and Roles continues my focus on love and work by exploring marriage, parenthood, and careers. In the marriage section, I'll scan marriage ideas around the world, explore how marriages (and love relationships) evolve, and offer insights into how to connect lovingly for life. Then you'll find out how becoming parents changes couples, and learn what twenty-first-century motherhood and fatherhood are like. The last section of the chapter examines work: How has our career path changed? What makes for happiness in this vital role? How do men's and women's work pathways differ? What is the impact of unemployment on mental health?

Chapter 12 — Midlife covers our longest life stage, spanning from the forties to the mid-sixties. Here, my focus is, "How do people change over adulthood?" As I survey the research on sexuality, scan intellectual and emotional development, and explore wisdom and happiness, you'll get insights into what makes a fulfilling adult life. The last sections of this chapter cover roles typical of middle age: grandparenthood and caring for elderly parents.