PART VI

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LATER LIFE

This two-chapter part, devoted to life's last stage, highlights how we develop as we move through senior citizenhood (the sixties and beyond). Chapter 13 covers issues relevant to both the young-old and old-old years. Chapter 14 emphasizes our pressing priorities in advanced old age.

Chapter 13—Later Life: Cognitive, Emotional, and Social Development begins with an overview of the historic twenty-first-century age boom, then looks at how memory changes as we age. During this discussion, you will learn a wealth of information about memory and aging and get insights into how to improve memory at any age. Then we turn to the emotional side of life. I'll outline a creative theory describing why old age is the best life stage, and offer tips for living meaningfully at this pinnacle age. The second half of this chapter tackles those social transitions, retirement and widowhood.

Chapter 14—The Physical Challenges of Old Age begins by describing the aging process and how it progresses into disease and disability. Then I'll explore late-life sensory and motor changes and offer an in-depth look at that feared old-age illness: Alzheimer's disease. At the end of this chapter, you will learn about the living arrangements and health-care options people have when old-age frailties strike. This chapter will open your eyes to the challenges of age-related disabilities and, hopefully, sensitize you to the need to change the world to promote an ideal older adult–environment fit.

CHAPTER 13

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Later Life: Cognitive, Emotional, and Social Development

At age 65, Susan and Carl retired. They were healthy (at the time) and, with Carl's investments and their pensions, well off. They were passionate to enjoy these final decades, to travel, to focus on the moment, to revel in this new phase of life. Carl and Susan never had children, but they had their nieces and nephews and many friends. In particular, Susan was close to her niece, Emma, who called her favorite aunt "my adoptive mom."

For Susan and Carl, retirement meant spending time with their closest friends and family. It involved devoting weekdays to volunteering at church and taking long-anticipated cruises to Mexico, the Mediterranean, and Marrakesh. Most of all, it meant having the joy of being together, free from the demands of work. Carl's heart disease—first diagnosed at age 64—lent poignancy to their shared life. As it turned out, their retirement years were priceless, but over too soon. Carl died of coronavirus complications at the impossibly young age of 73.

After Carl's death, Susan felt numb. How can you go on without your high school sweetheart, your life love for over 50 years? But she was astonished by her mixed emotions: the loneliness and sense of loss, even when surrounded by friends; the incredible joy (for the priceless relationship she and Carl had); pride in her ability to go on.

Actually, Susan was amazed at her inner strength. Realizing that as an "old lady" of 74 she needed to make a new life, Susan enrolled in courses at the local college. She focused on her passion to minister to families in shelters and took over coordinating the parish's Monday meal. Determined to avoid the conflict-ridden relationships she observed among other widows—the yearning to visit younger

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family who had other priorities, foisting herself as an unwanted "fifth wheel" on married-couple friends—Susan even found a new female best friend to share her thoughts. Susan credited Carl's upbeat personality with teaching her to reach out. After a joyous half-century marriage, you develop confidence that boosts you for life!

Susan's life changed dramatically from the time she and Carl retired to when her husband got sick and died. These two chapters capture the developmental shifts people experience as they travel through the young-old (sixties and seventies) and old-old (over age 80) years. In this chapter, I'll focus on cognition and emotional and social development. In Chapter 14, I'll be following Susan as she moves into her eighties and confronts the physical frailties of old age.

Susan's life differs dramatically from many older widows around the globe — in her lifestyle, her upbeat, efficacious personality, in having money to enjoy her older years. Still, in one way, her experience is similar to that of millions of other people her age. She is a foot soldier in a later-life army storming through the developed world.

Setting the Context

Learning Outcomes

- Outline trends in the older population.
- Compare our contradictory attitudes about later life.

The well-known reason for this invasion is the baby boomers marching through later life. Moreover, due to our twentieth-century advances in life expectancy, once women reach that magical sixty-fifth birthday, they can expect, on average, to live for more than 20 years (National Center for Health Statistics, 2021).

Falling fertility is also causing this historic demographic change. When birth rates decline, the **median age** of a nation — the age when half the population is older and half is younger — rises. With childbearing rates dipping sharply in Europe and Asia, the median age of citizens in affluent countries is now well into middle age.

median age The age at which 50 percent of a population is older and 50 percent is younger.

The baby boomers, longevity, and low fertility produced our new, old world. You can track this demographic storm, in Figure 13.1, as it peaks in specific nations.

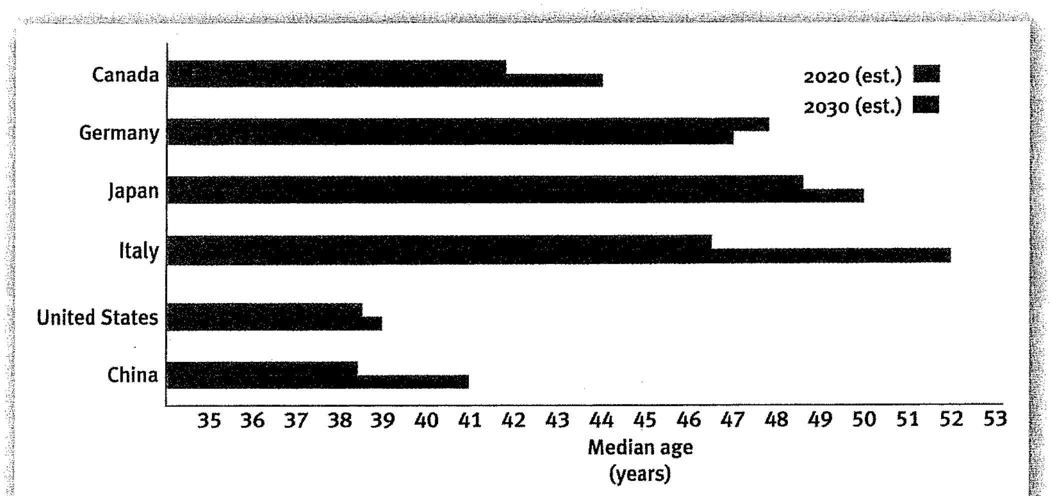

Figure 13.1: Median age of the population, selected countries, in 2020 and 2030 (projections) The median age in Italy, Germany, and Japan is now firmly middle-aged. Notice how this statistic will typically rise a few short years from now. How do you think living in an "older nation" will affect your life?

Data from the Central Intelligence Agency [CIA] World Factbook, 2020b

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The expressions on the faces of a healthy 65-year-old and a physically compromised 90-year-old say it all. Statistically speaking, there is a world of difference between being young-old and old-old.

young-old People in their sixties and seventies.

old-old People age 80 and older.

ageism Stereotypic, intensely negative ideas about old age.

By 2030 in Japan, where average life expectancy tops age 81 and fertility rates are low, the median age of the population will be roughly age 50. In that year, roughly 1 in every 5 Americans and 1 in 4 Europeans will be over age 65 (Quinn & Cahill, 2016).

How will you feel about living in a society where walkers outnumber strollers on your street? For hints, you might visit a U.S. city where the age storm has struck. In Sarasota, Florida, where the 65-plus population now tops 1 in 3, residents view age 70 as "young" (Fost, 2020). You aren't defined as elderly until you make it to age 80 and above (Fishman, 2010). In Sarasota, people understand: Statistically speaking, there is a world of difference between being healthy and **young-old** and having physical frailties (or needing those walkers) during the **old-old** years.

The health (and wealth) differences between young-old and old-old individuals may explain our contradictory stereotypes about later life. We have the image of vital widows volunteering, returning to school, and making new close friends — versus the vision of lonely, aged people languishing in nursing homes; the portrait of affluent, retired married couples traveling the world — and depressed, institutionalized elders with Alzheimer's disease.

But amid this diversity lies consensus about the negative qualities related to being old. Worldwide, people link old age with physical and mental decline. The same emotions apply throughout history, as you can see in the Experiencing the Lifespan box. Being the first U.S. presidential contest in history with two competing candidates well over 70, in 2020, these timeless **ageist** stereotypes returned center stage, when each political party hoped to convey this message: The *other* candidate is too mentally frail to do this job!

Experiencing the Lifespan Ageism Through the Ages

The hair is gray. . . . The brows are gone, the eyes are blear. . . . The nose is hooked and far from fair. . . . The ears are rough and pendulous. . . . The face is sallow, dead and drear. . . . The chin is purs'd . . . the lips hang loose. . . . Aye such is human beauty's lot! . . . Thus we mourn for the good old days . . . , wretched crones, huddled together by the blaze. . . .

(excerpted from an Old English poem called "Lament of the Fair Heaulmiere" [or Helmet-maker's girl], quoted in Minois, 1989, p. 230)

Many of us assume that people had better values and attitudes toward old age in "the good old days." Poems such as the one above show that we need to give that stereotype a closer look.

In ancient times, old age was seen as a miracle because it was so rare. Where there was no written language, older people were valued for their knowledge. However, this elevated status applied only to a few people — typically men — who were upper-class. For slaves, servants, and women, old age was often a cruel time.

Moreover, just as today, cultures made a distinction between active, healthy older people and those who were disabled and ill. In many societies, the same person who had been revered was subjected to barbaric treatment once he outlived his usefulness — that is, became decrepit or impaired. In southern India, families traditionally gave frail elders an oil bath and a deadly amount of coconut milk, designed to induce pneumonia and hasten death. Other cultures left their older people alone to die of neglect. Michelangelo and Sophocles, revered as old men, stand as symbols of the age-friendly attitudes of the nations in which they lived. However, the images portrayed in their creative works celebrated youth and beauty. Even in Classical Greece and Renaissance Italy — societies known for being enlightened — people believed old age was the worst time of life.

As historian Georges Minois (1989) concluded in a survey of how Western cultures treated their elders, "It is the tendency of every society to live and go on living: it extols the strength and fecundity that are so closely linked to youth and it dreads the . . . decrepitude of old age. Since the dawn of history . . . young people have regretted the onset of old age. The fountain of youth has always constituted Western man's most irrational hope" (p. 303).

(The information in this box is also from Fischer, 1977.)

Table 13.1: Older Folks: Fact or Fiction?

(Guess whether each item is *true* or *false*.)

1. Memory stays stable through midlife, then declines in later life.
2. There is little that we can do to improve memory in later life.
3. Old age is the most unhappy life stage.
4. Retirement is usually a terrible life stage.
5. Older workers are more rigid.
6. Widowhood is always a devastating emotional blow.
7. Due to scientific advances, we will soon be able to live beyond the maximum human lifespan.
8. Hearing losses in old age are "a piece of cake."
9. No one who has Alzheimer's disease can live a meaningful life.
10. About 50 percent of people over 65 live in nursing homes.

(I'll be discussing items 1–6 in this chapter and items 7–10 in Chapter 14.)

Answers: 1. F, 2. F, 3. F, 4. F, 5. F, 6. F, 7. F, 8. F, 9. F, 10. F

Still, the picture is not just negative. Notice that each 2020 presidential campaign touted their *own* candidate's decades of successful experience as the prime requirement for competently leading the United States! While we denigrate elderly people for being mentally incompetent, we revere them for being exceptionally wise.

In these next two chapters, I'll be giving you a wealth of scientific insights into our negative old-age stereotypes as I chart how thinking and physical abilities decline in the older years. But as we enter the emotional lives of older people, I hope to give you a more positive image of your late-life future, too. Do older adults really have a wiser perspective on life? Before reading the research relating to this topic and others, you might want to explore your personal old-age stereotypes by taking the "Older Folks: Fact or Fiction?" questionnaire (Table 13.1).

Tying It All Together

1. Our attitudes toward older adults involve (choose one) *mainly negative traits/positive and negative traits/positive traits alone.*
2. Negative ideas about old age most often reflect people in the (choose one) *young-old/old-old* years.

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

Cognitive and Emotional Development

Learning Outcomes

- Describe how memory changes with age, making reference to two major approaches to understanding memory.
- List interventions to improve memory.
- Outline socioemotional selectivity theory.
- Analyze why old age is the best and worst time of life.
- Evaluate what produces late-life happiness.

Now, let's start our research tour by exploring how memory, that important component of thinking, changes during our older years, and then turn to the emotional quality of later life.

Memory

When we think of specific cognitive abilities as we get older, we can look forward to positive changes — expanding our crystallized skills, becoming wise. These upbeat feelings do not extend to memory. With memory, starting in midlife, we see only decline. (The familiar phrase is, "Sorry, I'm having a senior moment!") Once people reach their seventies, the wider world is on high alert for memory problems, too.

In a classic study, psychologists demonstrated this mindset by filming actors aged 20, 50, and 70 reading an identical speech. During the talk, each person made a few references to memory problems, such as "I forgot my keys." Volunteers then watched only the young, middle-aged, or older actor and wrote about what the person was like. Many people who saw the 70-year-old described him as forgetful. No one who heard the identical words read by the younger adults mentioned memory! (See Rodin & Langer, 1980.)

Therefore, when a young person forgets something, we pass off the problem as due to external forces: "I was distracted"; "I had too much going on"; "It might be those four glasses of wine I had last night." When that same person is old, we have a more ominous interpretation: "Perhaps this is the beginning of Alzheimer's disease" (Erber & Prager, 1999). When you last were with an elderly family member and she forgot a name, did the idea that "Grandma is declining mentally" cross your mind?

Scanning the Facts

Are older people's memory abilities *really* much worse than those of younger adults? Unfortunately, the answer, based on thousands of studies, is yes. In testing everything from the ability to recall unfamiliar faces to the names of new places, from remembering the content of paragraphs to recalling where objects are located in space, older adults perform more poorly than younger adults. (See Dixon and others, 2007, for a review.)

As a memory task gets more difficult, the performance gap between young and old people expands (see Klencklen and others, 2017; Moret-Tatay and others, 2017). When psychologists ask older people to recognize a face they have previously seen, they do score a bit more poorly than younger adults (Fraundorf and others, 2019). But when instructed to memorize that person's name, and then recall it later, their performance is far, far worse. (This challenge is analogous to a multiple-choice versus short-answer test.)

Older people perform especially dismally when they have to remember *where* they saw that face (Dennis and others, 2008; see also Craik, Luo, & Sakuta, 2010): "Yes, I recognize that guy . . . but was he the cable repairman or a guest at Claire's commencement party last month?"

divided-attention task A difficult memory challenge involving memorizing material while simultaneously monitoring something else.

While connecting names to places, or remembering exactly where we heard information, is incredibly difficult in old age, this task is not easy at any life stage. I'll never forget when a twenty-something student server blew me away with this comment: "I remember you very well, Dr. Belsky. I learned so much in your *English Literature class* three years ago."

Elderly people do especially poorly on **divided-attention tasks** — situations in which we need to learn information while monitoring something else. Remembering to keep looking at your phone so that you don't miss your 3 P.M. class, checking Instagram, while "listening" to a lecture — these multitasking activities impair memory performance at any age. *Warning:* This is a documented fact! But while young people can manage these difficult divided-attention tasks, they are practically impossible in old age (Gothe, Oberauer, & Kliegl, 2008).

If you can relate to this impulse the next time you are tempted to text while you drive, keep this message in mind: *Divided-attention tasks* make memory worse (and life potentially more dangerous) at *every* age!


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More depressing, when researchers pile on memory demands and add time pressures, deficits show up as early as the late twenties (Borella, Carretti, & De Beni, 2008). Returning to Chapter 12, it makes sense that when people have to remember new, random bits of information very fast, losses take place soon after youth. These requirements are prime examples of *fluid intelligence* tasks.

What is going wrong with memory as we age? Let's get insights from examining two different ways of conceptualizing "a memory": the information-processing and memory-systems approaches.

An Information-Processing Perspective on Memory Change

As I mentioned in Chapters 3 and 6, developmentalists who adopt an *information-processing approach* on cognition see memory as progressing through stages. The gateway system, which transforms information into more permanent storage, is called *working memory*.

Working memory contains a limited memory-bin space — the amount of information we can keep in our awareness. It includes an executive processor that controls our attention and transforms the contents of this temporary storage facility into material we remember later on. As I discussed in Chapter 6, when the frontal lobes mature during childhood, working memory-bin capacity dramatically improves. Unfortunately, as we travel through adulthood, working memory works worse and worse (Febo & Foster, 2016; Klencklen and others, 2017).

What explains this decline? One cause is a loss of synaptic plasticity in the hippocampus, the brain region involved in encoding new memories (Febo & Foster, 2016). Another involves deficits with the executive processor, that hypothetical structure manipulating material into the permanent memory store. As people age, they have more problems focusing this master controller and so can't attend as well to what they need to learn.

Study after study shows older people have special trouble screening out irrelevant information (Campbell, Lustig, & Hasher, 2020). When people age 70 or older must selectively attend to a task, competing thoughts intrude. The tendency to get mentally derailed is most overpowering when the irrelevant stimulus is arousing (Gallant, Durbin, & Mather, 2020) — getting captivated by a police siren out on the street when telling a story, being absorbed by what you plan to do today while reading a book.

This may explain that not infrequent conversational glitch. Have you ever heard an elderly loved one recount some life experience and suddenly get confused: "Now, what *was* the point of what I wanted to say?"

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While this grandma is passionate to explain her youthful experiences as a 1960s social protester to a young friend, she may forget the story's main point midway through her exciting tale.

When we think of executive functions like selective attention, a particular brain structure comes to mind. Later-life memory deficits, according to current thinking, in good part reflect deterioration in the frontal lobes (Febo & Foster, 2016). Neuroimaging studies allow researchers to track this loss over time (Johansson and others, 2020). Although they can't visualize individual cells, animal research combined with this data confirms that neural deterioration is universal in the elderly brain (Febo & Foster, 2016).

How does the older brain adapt? Because brain-imaging techniques allow us to track activation patterns when adults are given memory tasks, they offer fascinating information about this issue, too.

With easy memory challenges, such as remembering a few items, notice from Figure 13.2 that older adults show a broader pattern of frontal-lobe activity compared to young adults. But, as the task gets difficult, the older brain shifts to underactivation — suggesting that it totally maxes out! (See Febo & Foster, 2016; Park & McDonough, 2013; Reuter-Lorenz, 2013.)

Another study, measuring the activation patterns involved in memorizing happy and upset faces, showed that, while older people "recruit" distinctive neural networks to remember these different emotions, young adults rely on a single system for encoding both cues (Ziaei, Salami, & Persson, 2017).

These findings are depressing. Does the aging brain have to go into overdrive and then "give up" (neurologically speaking) in confronting memory tasks? Luckily, the answer is no. Some memories are more indelibly carved in our mind.

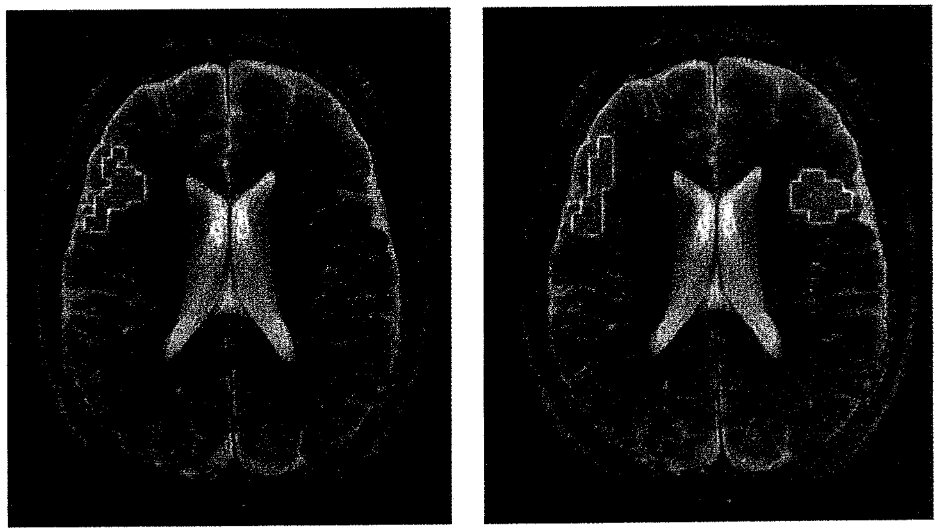


Figure 13.2: Frontal lobe activation in younger (left) and older (right) adults in a memory study In this fMRI study, researchers measured activation in the frontal lobes when older and younger adults were given an easy laboratory memory task. Notice in the left photo that, while regions of the left hemisphere alone are activated in young adults, the older brains (right image) are working harder to master this task—as here, activation occurs in both brain hemispheres.
Data from Reuter-Lorenz & Cappell, 2008

A Memory-Systems Perspective on Change

Think of the amazing resilience of some memories and the incredible vulnerability of others. Why do you automatically remember how to hold a tennis racquet even though you have not been on a court for years? Why is "George Washington," the name of the first U.S. president, locked in your mind while you are incapable of remembering what you had for dinner three days ago? These kinds of memories differ in ways that go beyond how *much* effort went into embedding them into our minds. They seem qualitatively different in a fundamental way.

According to the **memory-systems perspective** (Craik, 2000; Tulving, 1985), there are three basic types of memory.

- **Procedural memory** refers to information that we automatically remember, without conscious thought. A real-life example involves physical skills. Once we have learned a complex motor activity, such as how to ride a bike, we automatically remember how to perform that skill once we are in that situation again.

- **Semantic memory** is our fund of basic facts. Remembering that George Washington was the first president and knowing what a bike is are examples of the information in this well-learned, *crystallized* database.

- **Episodic memory** refers to the ongoing events of daily life. When you remember going bike riding last Thursday or what you had for dinner last night, you are drawing on episodic memory.

As you can see in these examples and those described in Table 13.2, episodic memory is the most fragile system. A year from now you will still remember who George Washington is (semantic memory). You will recall how to get on the bike and use the gears to pace your speed (procedural memory). However, even a few days after the event, you are likely to forget what you had for dinner on a particular night. Isolated events — from what day we last went bike riding, to what we ate last Tuesday, to the paragraph you are reading now — are especially vulnerable to time.

The good news is that on tests of semantic memory, older people may do as well as the young (Dixon and others, 2007). Procedural memory is amazingly long-lasting, as we know when we get on a bike after not having ridden for decades and take off

memory-systems perspective A framework that divides memory into three types: procedural, semantic, and episodic memory.

procedural memory In the memory-systems perspective, the most resilient (longest-lasting) type of memory; refers to material, such as well-learned physical skills, that we automatically recall without conscious awareness.

semantic memory In the memory-systems perspective, a moderately resilient (long-lasting) type of memory; refers to our ability to recall basic facts.

episodic memory In the memory-systems perspective, the most fragile type of memory, involving the recall of the ongoing events of daily life.

Table 13.2: Examples of the Differences Among Procedural, Semantic, and Episodic Memory

Procedural Memory	Semantic Memory	Episodic Memory
You get into your blue Toyota and automatically know how to drive.	You know that you have a blue Toyota.	You memorize where you left your blue Toyota in the parking lot of the amusement park.
You automatically find yourself singing the words to "Jingle Bells" when the melody comes on the radio.	You remember that "Jingle Bells" is a song.	You remember the last time you heard "Jingle Bells."
You get excited as you approach your college campus for fall semester.	You know that you are a student at X University and that you are a psychology major.	You memorize the room number of this class during the first week of the new semester.*
I unconsciously find the letters I am typing on my iPad.	I know that I am writing a book called *Experiencing the Lifespan*.	I remember that today I must go to the library and scan an article on memory that I will need in writing this chapter.

*Now that it's late in the semester, the location of this class has migrated into procedural memory, so, although you automatically walk to the door, if a friend says, "I'll meet you at class. Just tell me the room number," you are apt to draw a blank!

down the road. The real age-related loss occurs in episodic memory — remembering the details of daily life.

This decline in episodic memory is what people notice when they realize they are having more trouble remembering the name of a person at a party or where they parked the car. Our database of semantic memories stays intact until well into later life (Ofen & Shing, 2013) — explaining why we expect older people to outperform the young at crystallized verbal challenges such as crossword puzzles. People with Alzheimer's disease can retain procedural memories after the other memory systems are largely gone. They can walk, dress themselves, and even remember (to the horror of caregivers) how to turn on the ignition and drive after losing their ability to recall basic facts, such as where they live.

The incredible resilience of procedural memory explains why your 85-year-old aunt, who was a trained musician, can still play the piano beautifully, even though she is now incapable of remembering family members' names. Why is this system the last to go? The reason, according to neuropsychologists, is that the information in procedural memory resides in a different region of the brain. When we first learn a complex motor skill, such as driving or playing an instrument, our frontal lobes are heavily involved. Then, after we have thoroughly learned that activity, this knowledge becomes automatic and migrates to a lower brain center, which frees up our frontal cortex for mastering other higher-level thinking tasks (Friedman, 2003).

Actually, this is good. If I had to focus on remembering how to type these words on my computer, would I be able to simultaneously do the complicated mental work of figuring out how to describe the concepts I am explaining now?

In sum, the message with regard to age and memory is both worse and far better than we thought: As we get older, we do not have to worry much about remembering basic facts. Our storehouse of crystallized knowledge is "really there." However, we will have more trouble memorizing bits of new information, and these losses in episodic memory show up at a surprisingly early age.

Ralf Nau/Getty Images

Why can an elegant 85-year-old pianist still beautifully entertain you, even though she is forgetting basic facts about her life? Because her talents have migrated into procedural memory — the final memory system to go.

Keeping Memory Fine-Tuned

What should people do when they notice that their ability to remember life's ongoing details is getting worse? Let's look at three approaches.

Use Selective Optimization with Compensation The first strategy is to use Baltes's three-step process, spelled out in Chapter 12: (1) Selectively focus on what you want to remember — that is, don't clog your working memory bins with irrelevant thoughts; (2) optimize, or work hard, to manipulate material in this system into permanent memory; (3) use compensation, or external memory aids.

For example, to remember where you parked at the airport: (1) Focus on *where* you are parking when you slide your car into the spot. Don't daydream or get distracted by the need to catch the plane. (2) Work hard to encode that specific location in your brain. (3) Take a photo on your phone so you won't have to remember that place all on your own.

At this point, readers might be thinking: Why not just bypass those difficult executive-functions challenges (selecting and optimizing) and skip to compensation, by using your phone? The problem is that over-relying on environmental supports has a negative side (Lindenberger & Mayr, 2014). If older people — or any person — depends excessively on this kind of help, they are destined for problems when those aids malfunction. Put concretely, if you forget to take that photo, or your smartphone starts dying on the way to your car, you will be totally lost. Moreover, no technology can eliminate our need to memorize everyday episodic facts, such as linking names to faces, remembering when we took Dr. Belsky's class, or recalling where we might have misplaced our keys. So let's turn to optimization (Baltes's step 2), by spelling out strategies for effortlessly sliding information into our memory bins.

Use Mnemonic Techniques Have you ever noticed that some episodic events are locked in memory (such as your wedding day or the time you and your significant other had that terrible fight), while others fade? Everyone — both old and young — remembers emotional stimuli best (see Ziaei, Salami, & Persson, 2017) because, as I suggested in the infancy chapters, we are biologically primed to be sensitive to social cues. Therefore, the key to memorizing isolated bits of information is to make material stand out emotionally.

mnemonic technique A strategy for aiding memory by using imagery or enhancing the emotional meaning of what needs to be learned.

Mnemonic techniques are strategies to make information emotionally vivid. These approaches range from using the acronym OCEAN to help you recall the name of each Big Five personality trait in studying for the Chapter 12 test, to thinking, when introduced to the elderly woman in the photo, "I'll remember her name is Mrs. White because of her hair."

Kostiantyn Voitenko/Alamy

Although his main goal is to greet this woman in a warm, personal way, to remember his new friend's name, an elderly man might want to step back and use the mnemonic strategy of forming a mental image, thinking, "I'll remember it's Mrs. White because of her hair."

The fact that we learn emotionally salient information without effort may explain why our memories vary in puzzling ways in real life. A history buff soaks up every detail about the Civil War but remains clueless about where he left his socks. Because your passion is developmental science, you do well with very little studying in this course, but it takes hours to memorize a single page in your biology text.

Actually, the principle that emotional events are locked more firmly in our brain may partly account for our stereotype that older people remember their youth better than their current life. In fact, when researchers asked adults to recall self-defining events in their personal autobiographies ("the day I got accepted into graduate school"; "when I hit that car on Lake Shore Drive in November of 1982"), elderly individuals did perform better than the young! (See Martinelli and others, 2013.)

Work on the Person's Mental State This brings up the thought that standard laboratory memory tests are unfair to older adults. These tests require remembering random bits of episodic information, so they showcase the very memory skill that dramatically declines with age. Wouldn't elderly people do comparatively better when asked to remember emotionally salient information they need in their daily lives?

Now, compound this bias with the poisonous impact of self-doubt. If you were 70 or 80, imagine how you would feel when asked to participate in a memory study. Wouldn't you be frightened, thinking, "This test might show I have Alzheimer's disease"?

Actually, just being told, "I'm testing your memory," makes older people feel years older (Hughes, Geraci, & De Forrest, 2013). Moreover, labeling a test as "measuring memory" impairs an older person's performance on *any* cognitive test. In one scary study, after being informed that they'd be taking a memory test, 70 percent of older adults scored below the clinical cut-off for Alzheimer's disease on a classic diagnostic test, compared to less than 1 in 5 people not given that information! Conversely, when researchers said a given IQ scale tapped wisdom, older people's performance improved — even though that test really measured a fluid skill (Hehman & Bugental, 2013)!

Moreover, while subjective memory complaints ("I'm having terrible trouble remembering") have a clear relationship with brain deterioration (Chen and others, 2018; see also Chapter 14), what also predicts cognitive loss is having a pessimistic view of aging (Chopik, Kim, & Smith, 2015) and feeling unhappy with one's life (Goveas and others, 2014).

So, to take a family example, when my 90-year-old mother complained, "I can't remember anything," we children were wrong to *automatically* assume that she was developing Alzheimer's disease. And, after taking action to improve my mom's emotional state by moving her to a continuing care community (described in Chapter 14), her memory greatly improved.

Actually, in contrast to the perception that late-life memory loss is caused by an irreversible brain "condition," teaching elderly adults memory improvement strategies does work (Frankenmolen and others, 2018). Even people in their late 70s and 80s can be trained to expand their working memory bins (Hering and others, 2019).

This heartening growth is mirrored in neural changes (Iordan and others, 2020). Researchers use everything from video games (designed to improve executive functions) with residents in retirement homes (McCord and others, 2020) to teaching memory-enhancing tips to help older people handle the complex details of daily life (Brom & Kliegel, 2014; Burkard and others, 2014; McDaniel and others, 2014). Still, we run into the problem of motivation. People "get lazy" (meaning, they do not follow through) because optimization demands serious mental work! (See Burkard and others, 2014.) ■

Developmental Psychology Videos

Old Age: Learning and Moving at the Same Time
In this video, you will hear from developmentalist Paul Baltes as he describes his studies of selective optimization with compensation in older adults. Achieve

Emotional Priorities (and Well-Being)

Everyone believes that memory declines with age. But as I mentioned earlier, we have more positive ideas about our emotional lives. Does old age really bring wisdom and emotional balance? Laura Carstensen believes it does.

socioemotional selectivity theory A theory of aging (and the lifespan) put forth by Laura Carstensen, describing how the time we have left to live affects our priorities and social relationships. Specifically, in later life, people focus on the present and prioritize being with their closest attachment figures.

Focusing on Time Left to Live: Socioemotional Selectivity Theory

Imagine that you are elderly and aware of your limited time left to live. How might your goals change? The idea that our place on the lifespan changes our agendas is the premise of Carstensen's **socioemotional selectivity theory**.

According to Carstensen (1995), during the first half of adult life, our push is to look to the future. We are eager to make it in the wider world. We want to reach a better place at some later date. As we grow older and realize that our future is limited, we refocus our priorities. We want to make the most of our present life.

Carstensen believes that this focus on making the most of every moment explains why late life is potentially the happiest life stage. When our agenda lies in the future, we often forgo our immediate desires in the service of a later goal. Instead of telling off the boss who insults us, we hold our tongue because this authority figure holds the key to getting ahead. We are nice to that nasty person, or go to that party we would rather pass up, in order to advance socially or in our career. We accept the anxiety-ridden months when we first move to an unfamiliar city because we expect to feel better than ever in a year or two.

In later life, we are less interested in where we *will* be going. So we refuse to waste time with unpleasant people or enter anxiety-provoking situations because they may have a payoff at some later point. Almost unconsciously, we decide, "I don't have that long to live. I have to spend my time doing what makes me feel good emotionally *right now.*"

Furthermore, when our passion lies in making the most of the present, Carstensen argues, our social priorities shift. During childhood, adolescence, and emerging adulthood, our mission is to leave our attachment figures. We want to expand our social horizons, form new close relationships, and connect with exciting new people who can teach us new things. Once we have achieved our goals, we are less interested in enlarging our social circle. We already have our family and network of caring friends. So we center our lives on our spouse, our best friends, and our children — the people we love the most.

This focus on emotional closeness is paralleled in the social media world. Older people (not unexpectedly) have much fewer Facebook friends on average than the young, and their networks are composed of many more real friends (Chang and others, 2015). (Actually, having a higher ratio of "real" to total social media friends and followers is related to feeling less lonely at every age. Rather than demonstrating world-class connectedness, accumulating 1,000-plus random Facebook acquaintances may signal feeling isolated and alone!)

When Do We Prioritize the Present, Regardless of Our Life Stage?

But is this change in priorities *simply* a function of being old? The answer is no. Adults with fatal illnesses also voted to spend an evening with a familiar close person. So did people who were asked to imagine that they were about to move across the country alone. According to Carstensen, whenever we see our future as limited, we pare down our social contacts and spend time with the people we care about the most.

Although typically you may be content to live a continent away, socioemotional selectivity theory explains why, when you are in danger of losing your loved ones, you want to be physically (or virtually) close. So you fly in to spend time with your beloved best friend when she is seriously ill. You plan weekly Zoom meetings with family members in far-flung states when the coronavirus hits.

The theory accounts for the choices my cousin Clinton made when he was diagnosed with lymphoma in his twenties. An exceptionally gifted architect, Clinton gave up his promising career and retired to rural New Hampshire to build houses, hike, and ski for what turned out to be another quarter-century of life. Clinton's funeral, at age 50, was an unforgettable celebration — a testament to a person who, although his life was shorter than most, lived fully for longer than many people who survive to twice this age. Are you witnessing socioemotional selectivity theory in operation in your life right now?

Making the Case for Old Age as the Best Time of Life

paradox of well-being The fact that, despite their physical and mental losses, elderly people report being just as happy and often happier than younger adults.

positivity effect Older people's tendency to focus on positive experiences and screen out negative events.

This passion to make the most of every moment partly explains the **paradox of well-being** — the puzzling research showing that optimism and life satisfaction take an upswing in later life (Chopik, Kim, & Smith, 2015; John & Lang, 2015). Here are three (related) causes.

Older People Prioritize Positive Emotional States This bias to focus on upbeat feelings has been so well documented that it has its own label: the **positivity effect**. Imagine being at a casino and sitting next to an elderly adult. Carstensen's research suggests the older person will be just as happy as you when she expects to win. But she probably won't be upset (or will get far less disturbed) when she loses (Nielsen, Knutson, & Carstensen, 2008).

People of every age, as I've been highlighting, remember emotional stimuli best. However, while we typically attend selectively to threatening events (recall Chapter 3's discussion of the infant fear bias), older people reframe their negative experiences in a happier way (Sparks & Ledgerwood, 2019).

In one compelling experiment, developmentalists tied this impulse to feeling one's future was limited *at any life stage*. Researchers asked young and elderly volunteers to write about how they would spend their days if (1) they only had 6 months to live or (2) their life expectancy was extended to age 120. Then the researchers measured both groups' recall of happy and distressed faces. At each age, people primed to expect a limited future remembered a higher fraction of happy faces (Barber and others, 2016)!

But there are interesting limits to the positivity principle. In viewing crowds of strangers, older adults gaze more at angry faces, perhaps because noisy, distracting gatherings become repellent in old age (Bucher and others, 2020; more about this when I discuss hearing deficits in Chapter 14). When given the choice to look at joyous strangers versus unhappy loved ones, elderly adults much prefer gazing at people they love, even when their attachment figures look distressed (Fung, Lu, & Isaacowitz, 2019). The *real* reason for these surface exceptions proves the truth of the socioemotional selectivity rule: Knowing death looms on the horizon makes us passionate to center on what is most meaningful in life!

Wouldn't you think this grandparent would much prefer to look lovingly at a grandchild than at any stranger, no matter what the beloved child's mood?

Seeing Time as Slipping Away Stimulates the Search for Meaning Imagine you are well aware you have a limited time to live. Wouldn't seeing life's hourglass rapidly dwindling propel you to take meaningful action in the world? Psychologists asked different age groups, "How fast did yesterday go by?" As expected, elderly adults, compared to younger people, felt time flew by faster. But, interestingly, this subjective sense was only true during meaningful activities, such as caring for others or learning something new, not while eating or watching TV (John & Lang, 2015). Therefore, in contrast to our stereotypes, boredom — that bane of the human condition — should be *less common* in old age, because older people are highly motivated to make each minute of living count.

Older People Live Less Stressful Lives Now combine this passion to make each day full of meaning with the external reasons old age should be a happy life stage: no longer having the hassles of raising children or the gut-churning pressures to perform at work. Older people report fewer daily stresses than younger adults (Charles and others, 2010). They proactively take care to minimize minor frustrations before they get out of control (Neubauer, Smyth, & Sliwinski, 2019). An added bonus is that the outside world treats older adults with special care (Luong, Charles, & Fingerman, 2010).

In one study, when researchers asked adults how they would react in a difficult interpersonal situation, people said they would be prone to hold off confronting someone if that individual was old (Fingerman, Miller, & Charles, 2008). An elderly speaker alerted my class to this perk when he mentioned, "The best thing about being 88 is that everyone is incredibly nice!" If strangers opened doors for you, and everyone made a special effort to be kind, wouldn't you feel better about your fellow man (and woman)?

So, knowing your life will end soon provides surprising emotional bonuses. Moreover, in old age, people have more luxury to focus on what gives them meaning, and the outside world bothers them less!

What Can Make Old Age the Unhappiest Time of Life?

But at this point, many of you may think, "Something is wrong with this picture." What about the miserable elderly people whom the world doesn't treat kindly — older adults left to languish, lonely and impoverished, in their so-called golden years?

When I gave talks on successful aging at local senior centers in my thirties (some gall!), I vividly recall one 89-year-old woman who put me in my place: "Wait till you are my age, young lady. Then you will *really* know how terrible it is to be old!"

The rise in age-related job layoffs (described in the next section) is destined to impair the emotional quality of the older years. As "social connectedness" is critical to human happiness, widowhood and outliving friends *must* take a psychological toll. Now, combine this with the physical losses of old age, and it should come as no surprise that loneliness takes an upswing during the old-old years (von Soest and others, 2020).

So, the paradox of well-being extends only so far. When people are physically impaired, robbed by death of their close attachments, and *cannot* act productively (the extreme image here is languishing in a nursing home), life can lose all purpose and joy. As one formerly ideally aging man wrote: "I was still driving, walking . . . and feeling pretty confident . . . at age 87; now after three more years of age-related decline, I've almost had enough . . . living without the people and possessions that shaped my life" (adapted from Crum, 2014, p. 6).

Still, let's not stereotype all ninety-somethings as living in a dismal holding pattern, waiting for death. As my inspiring interview with Jules in the Experiencing the Lifespan box shows, some people live exceptionally gratifying lives at the uppermost limits of life.

Experiencing the Lifespan Jules: Committed to a Career at Age 94

It was a hot August morning at Vanderbilt University as friends, colleagues, and students gathered to celebrate the publication of his book. Their voices often cracked with emotion as they rose to testify: "You changed my life. You are an inspiration—the best therapist and supervisor I've ever had." Frail, bent over, beginning to doze—suddenly, 94-year-old Jules came to life. "My book traces the development of my ideas about ideal mental health. It's been a 60-year journey to identify the 'fully functioning person' that I'm still trying to get right today." Who is this revered role model? What made Jules the person he is, and what is his philosophy about aging and life? Let's read this interview.

My parents left Europe right before the First World War. So in 1915, I was lucky enough to arrive in this world [or be born]. Growing up in Baltimore, my brothers and I were incredibly close because, as the only Jewish family in our Christian immigrant neighborhood, we were living in an alien world. I remember the neighborhood kids regularly taunting us as Jesus killers as we walked to school. So we learned from an early age that the world can be a dangerous place. What this experience did was to take us in the opposite direction . . . to see every person as precious, to develop attitudes that were worldwide.

When I was a teenager, and asked myself, "What is important in life?" the answer was "relationships," . . . to have a fundamental faith in people. It was clear that human beings had a long way to go to reach maturity, but you need to act ethically and lovingly. I also looked to the Bible for guidance, asking myself, "What do the ancient prophets tell us about living an ethical life?" During the Second World War, my brothers and I were conscientious objectors. I knew I could never kill another human being.

I started out my work life as a public school teacher in Baltimore. I had no desire to get a Ph.D., but when I read a paper by Carl Rogers* in 1948, who was developing his client-centered therapy, I was electrified: Understand the person from his own framework; don't be judgmental; look beyond the diagnosis to the real human being. By listening empathically and relating unconditionally, you can guide a person toward health. Those decades collaborating with Carl ended up defining my life work.

I'm still the same person, the same adolescent hiding in the body of a 94-year-old man—but with much more experience in living! The difference is that, physically, I am handicapped [with congestive heart failure] and so I use a shorter horizon. Instead of thinking a year ahead, I might think about a week. . . . I am well aware that I could die any time. But it's unthinkable to me not to do therapy. I'm incomplete if I am not expressing my passion in life.

It's important never to put life in the past tense. There is no such thing as "aging" or "retirement." You are always learning and developing. When I was younger and looked to the Bible for guidance, I gravitated to the prophet Micah. Micah sums up my philosophy for living in this one sentence: "What doth the Lord require of me but to do justly, to love mercy, and to walk humbly with thy god."

*Rogers was one of the premier twentieth-century psychologists.

Table 13.3: Erikson's Psychosocial Stages

Life Stage	Primary Task
Infancy (birth to 1 year)	Basic trust versus mistrust
Toddlerhood (1 to 2 years)	Autonomy versus shame and doubt
Early childhood (3 to 6 years)	Initiative versus guilt
Middle childhood (7 to 12 years)	Industry versus inferiority
Adolescence to emerging adulthood (teens into twenties)	Identity versus role confusion
Early adulthood (twenties to early forties)	Intimacy versus isolation
Middle adulthood (forties to sixties)	Generativity versus stagnation
Late adulthood (late sixties and beyond)	Integrity versus despair

According to Erikson, our task in later adulthood is to look back over our life to see if we accomplished what we set out to do. Older people who know they have lived fully are not afraid to die. But those who have serious regrets about their lives may be terrified of death and feel a sense of despair.

Decoding Some Keys to Happiness in Old Age

Do you have an old-age role model such as Jules, someone who believes he is developing at age 90 or 94? What makes these people stand out? For one thing, Jules demonstrates the openness to other people's feelings, self-efficacy, and big-picture view of life that defines being wise (see Chapter 12). Most striking is this master therapist's generativity, and the fact that Jules has reached Erikson's milestone of *integrity* (see Table 13.3). Jules knows he has lived according to the prophetic guidelines that he views at the core of having a meaningful life.

Erikson believed that to reach **integrity** older people must review their lives and make peace with what they have previously done. But happiness in old age does not involve dwelling on the past. As with Jules, it involves having meaningful goals in your present life (Li & Siu, 2020).

integrity Erik Erikson's eighth psychosocial stage, in which elderly people decide that their life missions have been fulfilled and so accept impending death.

Living a purposeful, meaningful life has an additional bonus: It makes people more likely to survive to Jules's age! In summarizing more than 60 longitudinal studies, researchers found that adults who agreed decades earlier with questionnaire items such as, "My life is fulfilling" or "I feel I am making a difference," died at older ages than their peers (Martin-Maria and others, 2017). Having an optimistic view of aging — or like Jules, seeing later life as a time of development — can also operate as a self-fulfilling prophesy, predicting superior health down the road (Laditka & Laditka, 2016; Wurm and others, 2017).

Bottom line: Be positive, live a generative life, be open to other people, remain lovingly attached, see aging as a time of growth — these are some keys to living happily into advanced old age (and living happily during any stage of adult life!).

INTERVENTIONS: Using the Research to Help Older Adults

Now, let's summarize all of these messages. How can we help older people improve their memory skills? How should you think about the relationship priorities of older loved ones, and when should you worry about their emotional states? Here are some suggestions:

- As late-life memory difficulties show up in situations where there is "a lot going on," give older people ample time to learn material and provide them with a non-distracting environment (more about this environmental engineering in Chapter 14).

- Don't stereotype older adults as having a "bad" memory. Remember that semantic memory stays stable with age, and that teaching mnemonic strategies works. Help people develop their memory skills by suggesting this chapter's tips. Also, however, be realistic. Tell the older person, "If you notice a decline in your ability to attend to life's details (episodic memory), that's typical. It does *not* mean you have Alzheimer's disease" (Dixon and others, 2007).
- Encourage older loved ones — even those with disabilities — to maintain a personal passion. Being "efficaciously" engaged in living not only helps slide information through our memory bins but makes for a happy life.
- Drawing on socioemotional selectivity theory, don't expect older people to automatically want to make new friends. An elderly relative who says, "I don't want to go to the senior center. All I care about is my family and old friends," may be giving an age-appropriate response. (Later in this chapter, I'll be discussing an exception, in the section describing coping after widowhood.)
- Don't imagine that older people are unhappy. Actually, assume the reverse is true. However, be alert to depression in someone who is physically frail and socially isolated. Again, the key to warding off depression in old age is the same as at any age: being productive, feeling closely attached, having a sense of meaning in life.

Tying It All Together

1. Ivan is planning to teach lifespan development at the senior center. He's excited; but since, until now, he's taught only younger people, he's worried about how memory changes might affect his new students' enjoyment of the class. Based on your knowledge of which memory situations give older people trouble, suggest changes Ivan might make in his teaching.
2. Classify each of the following memory challenges as involving episodic memory, semantic memory, or procedural memory.
   a. Someone asks you for your street address.
   b. Someone asks you what you just read in this chapter.
   c. Someone asks you to go bike riding.
3. Which abilities in the previous question (a) will an older loved one retain the longest if she gets Alzheimer's disease, and (b) will start to decline early in life?
4. As you study this section, come up with a vivid image to embed the major terms in your mind. (For instance, to remember *working memory*, think of a brain on a treadmill; to recall *episodic memory*, think of an episode of your favorite show.) Do you agree that this optimization technique, while helpful, demands mental effort?
5. You are eavesdropping on three elderly friends as they discuss life. According to socioemotional selectivity theory, which *two* comments might you overhear?
   a. Shanthi says, "Now that I'm older, I want to meet as many new people as possible."
   b. Allen reports, "I'm enjoying life more than ever today. I'm savoring every moment — and what a pleasure it is to do just what I want!"
   c. Milly mentions, "I've been spending as much time as possible with my family, the people who matter the most."
6. Based on this chapter, give four reasons why happiness should peak in later life.

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

SOMETHING TO CONSIDER: Later Life: Cognitive and Socioemotional Development: Improving Memory Achieve

Social Development

Now let's look at how people find meaning as they confront the classic late-life transitions of retirement and widowhood.

Learning Outcomes

- Compare retirement trends worldwide, making reference to Germany and the United States.
- Analyze U.S. issues, patterns, and happiness during retirement.
- Explain widowhood challenges.

Retirement

When we imagine the U.S. retirement age, we immediately think of 65. But you might be surprised to know that the age for collecting full Social Security benefits is now 67 (Social Security Administration, 2021). When we think of being retired, we imagine a short life stage before death. But if you leave work in your early sixties — particularly if you are female — expect to be retired for about a quarter of your total life!

What caused retirement to take up a huge chunk of the lifespan, and what is happening to this life stage in the United States today? Stay tuned as I scan the global economic retirement scene and then summarize current U.S. retirement trends.

Setting the Context: Differing Financial Retirement Cushions

If you are like many U.S. young people, you probably aren't sure whether retirement will continue to exist once you reach later life. As the baby boomers flood into their older years, this concern is widespread throughout the affluent world because, as you will learn soon, fewer younger adults will be working to support retirees (Willige, 2020). In fact, today retirement does not exist in the least developed regions of the world — because poor nations don't enjoy the government-financed programs that most nations now provide (Social Security Administration, 2020).

By the late twentieth century, government-sponsored programs, sometimes allowing retirement as young as the late fifties, were a fixture in more than 160 countries (Kinsella & Velkoff, 2001). But even in Europe, which has universal old-age government supports, retirement anxieties differ from place to place. In Scandinavia, with its shared national goal to "help everyone cradle to grave," residents feel secure that they will be helped in old age. In Central and Eastern Europe, where the gaps between rich and poor are wide and old-age income supports are more minimal, people are intensely worried about their retirement years (Ebbinghaus, 2021).

What retirement programs do affluent nations provide? For answers, let's compare Germany and the United States.

Germany: Mercedes Model of Government Support Germans currently do worry about retirement because they live in a rapidly aging nation where the government may need to cut back on the funds citizens have long enjoyed — comfortable old-age income for life. Retirement in Germany is mainly financed by employee and employer payroll taxes similar to the system in the United States. However, unlike in the United States, the philosophy in Germany has been to keep people well-off during their older years. Until recently, Germans had no worries about falling into poverty in old age (Monash Centre for Financial Studies, 2019). German retirees had *more* spending power as they traveled further into old age (Hungerford, 2003).

The United States: Going It Alone with Modest Government Help If Germany historically offered a Mercedes-like model, government-funded U.S. retirement is more like an old used car; it allows people to barely make it, but in no comfort. The reason is that the famous, guaranteed old-age insurance program called Social Security functions as a safety net to keep people from being destitute in old age.

Social Security, the landmark government program instituted by President Franklin D. Roosevelt in 1935 at the height of the Great Depression, gets its financing from current workers. Employees and employers pay into this program to fund today's retirees; then, when it is their turn to retire, adults get a lifelong stipend financed by today's working adults.

Social Security The U.S. government's national retirement support program.

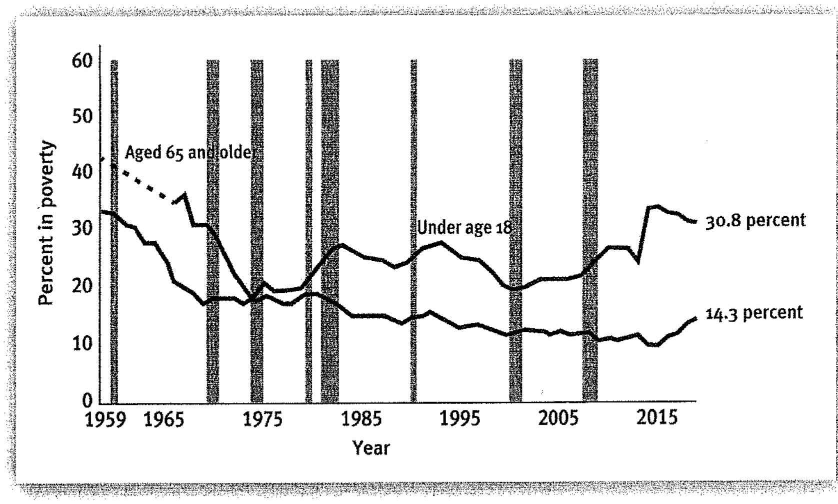


Figure 13.3: Poverty trends in the United States for older adults and children, from 1950 to 2019
In the mid-twentieth century, older people were the most disadvantaged segment of Americans. Then, 40 years ago, expansions in Social Security and Medicare dramatically cut these rates, meaning that, for the past two generations, children (orange bar) have been far more likely to live in poverty than people over age 65 (blue bar). By offering similar cash benefits to lower-income families with children, the current U.S. administration is hoping to perform an identical economic miracle for the young.
Data from Quinn & Cahill, 2016, p. 323; U.S. Census Bureau, 2020a

As Figure 13.3 shows, Social Security, which was dramatically expanded in the 1970s along with Medicare, was an economic miracle for U.S. older adults. From not being able to financially survive, people over 65 today are less likely to live under the poverty line than other U.S. age groups!

private pensions The major source of nongovernmental income support for U.S. retirees, in which workers and an employer put a portion of each paycheck into an account to help finance retirement.

Private pensions (and assets like personal savings) are the other supports floating retirement. Workers put aside a portion of each paycheck, and these funds, often matched by employer contributions, go into a tax-free account that accumulates equity. Then, at retirement, the person gets regular payouts, or a lump sum, on which to live (Johnson, 2009).

The central role of private pensions in financing retirement reflects the priority that the United States places on individual initiative. People are leery about the welfare-state implications of a federal government plan, preferring to provide tax incentives encouraging workers to plan for retirement on their own.

The problem is that, with an average retirement nest egg of $152,000, most baby boomers haven't come close to amassing the pension cushion (at least 10 times that amount) necessary to support a decent lifestyle for 15 or so years (Transamerica Center for Retirement Studies, 2019). Until the coronavirus hit, people often worked during retirement to make up for this shortfall. In 2019, almost 1 in 5 adults over age 65 reported they were still employed, even after they retired from a career job (DeSilver, 2019).

The exploding gig economy, coupled with a good economy, used to make it easy to find post-retirement work. People could supplement their funds by driving for ride-sharing companies, getting greeter jobs at Walmart, or being employed as clerks at the local grocery store. But these stopgap measures often just kept people afloat. Even before the pandemic, a good chunk of U.S. retirees were teetering on the cusp of poverty as they traveled into old age (Quinn & Cahill, 2016).

FG Trade/E+/Getty Images

This man would have had no trouble getting hired at this store when the economy was booming. Today, he might have been laid off under age 65!

Which older people are most apt to be poor in the United States? Because the income inequalities highlighted throughout this book persist, single women and ethnic minorities are more likely to *enter* retirement with just Social Security to keep them financially afloat. Worse yet, because Medicare does not cover chronic help with disabilities (more about this critical issue in Chapter 14), even people (particularly women) who had upper-middle-class lifestyles as adults are at high risk of being poor during advanced old age. The sad reality is that, if we focus just on the upper ends of the lifespan, old-age economic distress is not uncommon in the United States. The most at-risk segment of the elderly population, as Figure 13.4 shows, are women over age 80 who live alone.

Now that we understand the U.S. landscape, let's explore the different influences that go into the decision to leave work.

Exploring the Complex Push/Pull Retirement Decision

Imagine that you are in your sixties and considering leaving your job. As I've implied, your primary consideration is economic: "Do I have enough money?" However, a second force that comes into play in Western nations is health: "Have I been injured?" (Mok, 2020). "Can I physically continue at work?" (De Preter, Van Looy, & Mortelmans, 2013; Wang & Shi, 2014). There may be another, insidious influence prompting your decision: age discrimination.

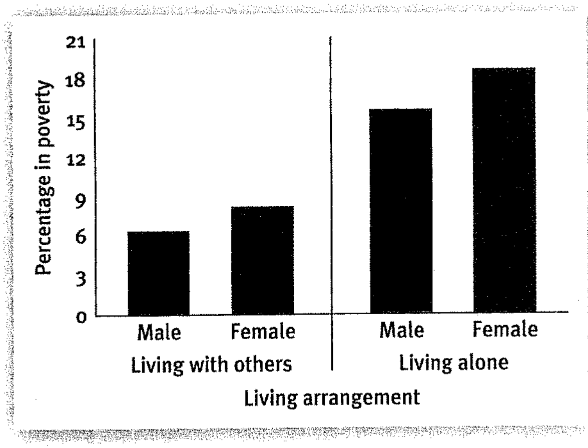


Figure 13.4: Poverty rates of people age 80 and older in 2017, by living arrangements Notice that almost 1 in 5 women over age 80 who live alone have incomes below the poverty line. If we look at the fraction of near-poor women living within twice the poverty line, this number is 1 in 2.

Data from Congressional Research Service, 2019

The Impact of Age Discrimination Age discrimination in the United States is illegal. People cannot get fired for being "too old." But because it's easy to get rid of more expensive workers — who tend to be older — for "business reasons," it's difficult to prove that "age" was the reason why a fifty-something worker got laid off (Rothenberg & Gardner, 2011).

Actually, even during 2019, a remarkable 50 percent of older workers felt they were prematurely pushed out of their jobs (Kita, 2019). The situation got more dire (no surprise) during the pandemic, when most employers could no longer pay their older, more costly employees (see Span, 2020).

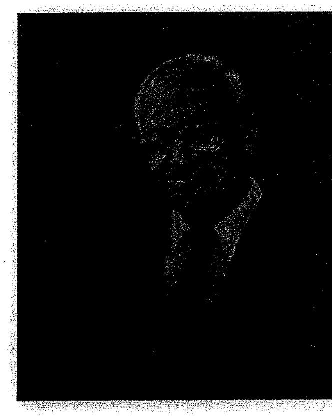
I personally witnessed this impulse to shed older workers in the summer of 2020, when a 59-year-old friend was summarily laid off after competently managing a dental practice for 20 years. Even though this woman had been called "irreplaceable" by her bosses, it was too tempting to hire a 30-year-old at half her salary, plus not be subject to the sick leave my friend took off for surgery after breaking her hip.

age discrimination Illegally laying off workers or failing to hire or promote people on the basis of age.

It's easy to rationalize these decisions based on old-age stereotypes: Older workers are less physically adept. They take more time off for health reasons. They are rigid, less adaptable, and make more mental mistakes (McCann & Keaton, 2013). The problem is that these images are false! In one Swedish study, age made people more flexible at work (Kunze, Boehm, & Bruch, 2013). Research in the United States suggested that older workers are, amazingly, *less likely* to take time off for being sick, in addition to being more reliable than younger employees (Newman, 2011)!

Still, these facts won't matter much when people over 50 face the challenge of finding a new job. Even during good economic times, given hypothetical older and younger job seekers, employers routinely go for the younger adult (Ekerdt, 2010; Rothenberg & Gardner, 2011). How many middle-aged and older people today are forced to retire early when they have the motivation, skills, and talents to continue working for many more decades of life (Bersin & Chamorro-Premuzic, 2019; Span, 2020)?

The Impact of Wanting to Work Longer Actually, we have concrete data that age produces better workplace skills. People over age 40 are three times more likely to start successful companies as their younger counterparts. Retirement can be emotionally devastating when people buy into the fantasy that life after 65 or 75 will be happier if you spend your days golfing or relaxing by the pool (Bersin & Chamorro-Premuzic, 2019).


Macmillan Learning

Dr. Albert Bandura, who developed his landmark social learning theory in his mid-thirties, is still going strong into his nineties because he can tailor his work to his changing capacities. This ability to feel flow at *every age* embodies self-efficacy, the famous term Bandura coined more than a half-century ago!

Who is passionate (and able) to keep working until their mid-seventies or up to age 85? These people are typically highly educated, well-off, and, like Jules in Experiencing the Lifespan, feel tremendous flow in a career (Adams & Rau, 2011; Boveda & Metz, 2016; Wang & Shi, 2014). One important force keeping me writing full-time is having control over the hours I spend at work — tailoring my work hours to be flow-inducing (see Chapter 10), efficaciously crafting my career to fit my changing capacities and needs (see Chapter 11). What about adults who *do* permanently retire? Are they depressed or thrilled after taking this step?

Life as a Retiree

The answer is "it depends." For educated workers, retirement may boost health (Smeaton, Barnes, & Vegeris, 2017; Wetzel, Huxhold, & Tesch-Romer, 2016) ("Now I am liberated to exercise and take good care of myself!"). But leaving work early and feeling forced out of the workforce (no surprise) negatively affects emotional and physical well-being (Bersin & Chamorro-Premuzic, 2019).

Actually, the qualities that make for retirement happiness are identical to those that produce a satisfying adult life: Be open to experience, conscientious, agreeable, and extraverted, but not neurotic (Henning, Lindwall, & Johansson, 2016); be healthy, happily married, and have the economic resources to enjoy life (Pinquart & Schindler, 2007). As socioemotional selectivity theory suggests, tailor each retirement day to focus on what gives you meaning (Lewis & Hill, 2020).

One advantage is entering retirement with a "calling" (see Chapter 11), a specific meaning-inducing life plan. Callings vary from exploring new artistic talents to developing the self ("I want to become wise"); but most often, one study showed, people retire to make a generative difference in the world (Duffy and others, 2017). In fact, you can predict whether a just-retired relative will flourish by answering these questions: Is this person healthy, is he wealthy, and did he voluntarily leave work? (See Potocnik, Torera, & Peiro, 2013.) Does she have a life passion? What is she like as a human being? (See Table 13.4 for a summary of these forces.)

How can you expect your relative to spend these years? Because "personality endures," one key is to look at her passions now (Atchley, 1989; Pushkar and others, 2010). So, a social activist joins the Peace Corps. A business executive volunteers at SCORE (Senior Corps of Retired Executives), advising young people about setting up small businesses. Others decide to take up new "bucket list" goals such as hiking the Himalayas or getting a history Ph.D.

Having a supportive partner, one study showed, reinforces these post-retirement expansion plans (Tomlinson, Feeney, & Peters, 2020). From backpacking to visiting Civil War sites, it helps to have a fellow traveler share this new voyage through life (another reason to look for a homogamous mate at every age!). People often use this time to pack in as many new learning experiences as they can.

A dazzling menu of options is available to older people passionate to expand their minds — from reduced fees at colleges, to lifelong learning programs, to senior center classes. Readers might be interested to know that, in the spirit of mind expansion (not credential collection!), I'm currently getting a master's degree in liberal arts and teaching in a lifelong learning program in my town.

As my goal and the agendas of millions of baby boomers reveal, in the Western world we see the older years as a time to vigorously connect to the world (Ekerdt, 1986). We even have (admittedly correlational!) data that shows engaging in meaningful activities can help stave off post-retirement cognitive decline (Hamm and others, 2020).

Table 13.4: Questions to Ask to Predict If a Relative Will Be Happy as a Retiree: A Section Summary
1. Did this person want to retire, or was he forced out of the workforce?
2. Is this person relying just on Social Security and/or entering retirement with less-than-adequate funds?
3. Is this person generally happy and well-adjusted?
4. Is this person married (happily!) and in good health?
5. Does this person have an absorbing calling or fulfilling retirement goal?

However, there is a different cultural model of retirement. In the traditional Hindu perspective, later life is a time to disengage from worldly concerns. Ideally, people become wandering ascetics, renouncing loved ones and earthly pleasures in preparation for death (Savishinsky, 2004). Although this plan is rarely followed in practice (after all, our need to be closely attached is a basic human drive!), let's not assume that our "do not go gently into the sunset," keep-active retirement ideal applies around the world.

Summing Things Up: Social Policy Retirement Issues

Now let's summarize these section messages by focusing on some critical social issues with regard to retirement.

- **Retirement is an at-risk life stage.** In the United States, the lack of pension income and other assets is the immediate threat to retiring. Another looming issue is cutbacks in Social Security (perhaps an increase until age 70 for receiving full benefits, or declining support levels). In 1950, there were about 16 workers for every U.S. retiree. Then, over the past 40 years, the **old-age dependency ratio**, or proportion of working adults to retirees, dramatically declined (Willige, 2020). Social Security was never supposed to finance a stage of life. It was instituted during an era when life expectancy was far shorter, and health issues made it impossible to work. Because the Social Security trust fund is set to run out around 2030, virtually ensuring retrenchments, millennials (if possible) need to increase their savings now! (See Quinn & Cahill, 2016.)

- **Older workers are (currently) an at-risk group.** From laying off more expensive older employees to bypassing "experienced" applicants, age discrimination at work is clearly alive and well (Ekerdt, 2010; Neumark, 2009). During the 1960s and 1970s, as you saw earlier, the United States took the landmark step of dramatically reducing poverty among older adults. Given the explosion of the gig economy (which doesn't offer pensions) and our tendency to prefer young employees, will economic pain again be typical as people travel into their late fifties and sixties during subsequent years?

Finally, I can't leave the topic of old-age poverty without touching on **intergenerational equity** — balancing the needs of younger and older people. Given that elderly U.S. citizens get Medicare and Social Security, and residents in many other Western nations receive even more lavish old-age aid, it's easy to argue that affluent societies are over-funding older people at the expense of the young. But abandoning these programs leaves people dependent on their families — which hurts everyone, young and old (Binstock, 2010). Suppose you had to choose between helping your children and supporting your grandmother, and destitute older people roamed the streets? Again, we are in this together. Life is not a zero-sum game.

old-age dependency ratio The fraction of people over age 60 compared to younger, working-age adults (ages 15 to 59). This ratio has been rising dramatically in recent decades.

intergenerational equity Balancing the needs of younger and older people; specifically, the idea that U.S. government entitlements, such as Medicare and Social Security, "over-benefit" older adults at the expense of other age groups.

Developmental Psychology Videos

Portrait of Aging: Mary

In this video, you will hear advice from a 94-year-old woman named Mary about staying active and involved in life after retirement and widowhood. Achieve

Widowhood

Although we worry about its future, most of us associate retirement with joy. That emotion does not apply to widowhood. In a classic study of life stress, researchers ranked the death of a spouse as life's most traumatic change (Holmes & Rahe, 1967).

Imagine losing your life partner after 60 years. You are unmoored and adrift, cut off from your main attachment figure. Tasks that may have been foreign, such as understanding the finances or fixing the food, fall on you alone. You must remake an identity whose central focus has been "married person" for all of adult life. Decades ago, British psychiatrist Colin Parkes (1987) beautifully described how the world tilts: "Even when words remain the same, their meaning changes. The family is no longer the same as it was. Neither is home or a marriage" (p. 93).

How do people mourn this loss? Who has special trouble with this trauma, and how can we help people cope? Let's look at these questions one by one.

Exploring Mourning

During the first months after a loved one dies, one classic study showed, people are often obsessed with the events surrounding the final event (Lindemann, 1944). Especially if the death was sudden, husbands and wives report repeatedly going over a spouse's final days or hours. They may feel the impulse to search for their beloved, even though they know intellectually that they are being irrational. Notice that these responses are similar to those of a toddler who frantically searches for a caregiver who has left the room. With widowhood — as the poignant comments of the women in the Experiencing the Lifespan box show — John Bowlby's clear-cut attachment response reemerges at full force.

Experiencing the Lifespan Entering a Widowhood Group

What is it like to lose your mate? What are some of the hardest things to endure in the first year after a spouse dies? Here are the responses I got when I visited a local support group for widowed people and asked the women these kinds of questions:

"I've noticed that even when I'm with other people, I feel lonely."

"I find the weekends and evenings hard, especially now that it gets dark so early."

"Sundays are my worst. You sit in church by yourself. People avoid you when you are a widow."

"I think the hardest thing is when you had a handyman and then you lose your handyman. You would be amazed at how much fixing there is that you didn't know about. My hardest jobs were George's jobs. For instance, every time I have a car problem I break down and cry."

"I was married to a handyman and a cook. He spoiled me rotten. You don't realize it until they are gone."

"For me, it's the incessant doctors' bills. I got one yesterday. It's that continual painful reminder of the death."

"And you get all this stuff from Medicare, from Social Security. This year will be the last I file with him."

"You just don't know what to do. I didn't know anything, didn't know how much money we had . . . didn't know about the insurance. . . . My family would help me out but, you know, it's funny—you don't ask."

"You have friends, but you can't really talk to them. You don't bring him up, and neither does anyone else."

"The thing that upsets me is that I'm scared that no one but me will remember that he was alive."

Experts dislike using the word *recovery* to describe bereavement, as this implies that mourning, a standard life process, is a pathological state (Sandler, Wolchik, & Ayers, 2008). Moreover, when people lose a spouse, they do not simply "get better." They emerge as different, hopefully more resilient, human beings (Balk, 2008a, 2008b; Tedeschi & Calhoun, 2008). Still, after about a year, we expect widowed people to "improve" in the sense of remaking a satisfying new life. People still care deeply about their spouses. However, this mental image is incorporated into the survivor's evolving identity as the widowed person travels through life.

Now, let's survey the messages we get from tracking people's feelings as they move from early bereavement into what attachment theorists might label the *working model* phase of widowhood — that is, constructing an independent life.

Widowhood Involves Fluctuating Emotions Interestingly (and in contrast to the image of unremitting pain), this research suggests that widowhood evokes contradictory emotions. In *meta-analyses* following widowed people, psychologists typically chart a regular decline in depressive symptoms over time (Kristiansen and others, 2019). However, in one study, life satisfaction scores showed a different pattern, dipping to a low at the first-year anniversary and then rising during the second year (Powers, Bisconti, & Bergeman, 2014). Other researchers, following a huge national sample of Australian adults, found that after widowhood, well-being rose (Anusic, Yap, & Lucas, 2014)!

What explains this strange finding? One possibility is that, as you saw in the chapter-opening vignette, even people in the happiest long-term marriages may not realize how well they can cope on their own. When you discover that, yes, you can prepare the taxes or fix the faucet, and you do not fall apart when finding yourself single after 50 or 60 years, you have a tremendous sense of self-efficacy. As the Chinese proverb puts it: Within the worst crisis lies an opportunity (or, in Chapter 12's terminology, a potential *redemption sequence*). As I described in Chapter 12, life traumas do promote emotional growth.

This is not to minimize the negative consequences of widowhood. Even a decade after a spouse's death, widowed people — particularly if they are male — have elevated depression rates (Jadhav & Weir, 2018; Yu, Kahana, & Kahana, 2019). The most powerful example comes from the **widowhood mortality effect** — a markedly higher risk of dying for the surviving spouse after a partner dies (Sullivan & Fenelon, 2014).

Now let's take a more detailed look at these challenges. What is the *main* issue widowed people face, and how can they cope?

widowhood mortality effect An elevated risk of death among surviving spouses after being widowed.

Loneliness Remains the Number-One Issue To get an in-the-flesh picture of what gives people pain, researchers asked volunteers whose partner had died about a year earlier to keep a diary for a week charting each stressful experience. What were the events, how intense was each experience, and when did each event occur (Ryckebosch-Dayez and others, 2016)?

While distressing feelings ran the gamut from emotions set off by external cues (being in bed alone, passing a place the former spouse had enjoyed), to regrets about being unkind to a former partner, or problems with practical concerns (cooking or repairing things at home), the *most* acute pain was loneliness — feeling deprived of the person who most loved you in life (see also von Soest and others, 2020). A friend, widowed for three years, beautifully captured this anguish when she made this comment: "People like me, but they don't love me."

Reaching Out to Establish New Routines Is Key Given that the primary issue is feeling disconnected, what is the cure? Another narrative study exploring people widowed for a longer period (on average, four years) suggested the solution is forcing yourself to establish regular routines (Davies, Crowe, & Whitehead, 2016). As one widower explained, "I go to a club now. . . . I didn't like it at the start. . . . It took me three or four visits before I started to settle in. . . . It takes your mind off things" (p. 536).

Friends Are Most Important in Determining How People Adjust Intense family support, or moving in with children, can ease loneliness for widowed people living in collectivist cultures such as China and Japan (Tiedt, Saito, & Crimmins, 2016; Zhou & Hearst, 2016). But, because sons and daughters have their own lives, in affluent individualistic nations, children may need to move on ("Now that it's been three months, I don't need to visit Mom every day. I have to take care of my own husband and kids"). Therefore, to cope effectively over the long term, widows need to efficaciously reach out to friends (Ha & Ingersoll-Dayton, 2008). The vital role friends play in widows' well-being was showcased in this German finding: While satisfying "family attachments" predicted happiness among married elderly women, for widows, a person's life satisfaction depended on having good friends (Albert, Labs, & Trommsdorff, 2010).

This woman may have met a fellow widow during this very year. But she immediately found a new best friend for life!

The virtue of friends is that, not only do companions share activities, they allow people to more openly discuss their distress. This tendency to clam up (that is, not embarrass people by discussing your pain) may explain why widows report feeling lonely even when in a group (recall the Experiencing the Lifespan box on page 386). And so, in another study measuring loneliness, researchers found the best cure for this number-one condition lay in making a *new widowed* friend (Utz and others, 2014).

At this point, readers may be tempted to urge everyone who has lost a spouse to join a widowed person's group. This is a mistake. An underlying message of my previous discussion is that most widowed people are resilient. We do them a disservice by assuming they are incompetent and totally in need of help. Actually, support groups for widowed people, psychologists find, are useful mainly for people who are having unusual trouble coping with this life event (Bonanno & Lilienfeld, 2008; Onrust and others, 2010).

What best helps widows find new friends is engaging in meaningful, flow-inducing retirement activities such as volunteering (Jiang and others, 2020). In contrast to what socioemotional selectivity superficially predicts, after widowhood, social networks expand. But here again the ideal goal is to find a single close attachment figure to (partly) substitute for a beloved spouse (Schwartz & Litwin, 2018). Who has special trouble coping with widowhood?

Predicting Which Widowed Adults Are Most at Risk

Our first thought is men. Women, so the stereotype goes, are more emotionally embedded in relationships. They are skilled at making friends and have more enduring relationships to cushion the blow. And yes, the stereotype seems scientifically true. Large-scale longitudinal studies suggest that women recover more quickly from being widowed (Kristiansen and others, 2019). Men are more vulnerable to descending into chronic depression after losing a spouse (Förster and others, 2019). Imagine losing your only attachment figure and you will understand why, for elderly widowers living alone, suicide is a major concern (Stroebe, Schut, & Stroebe, 2007).

Lost in loneliness, spending your days staring out at sea, this classic image of the elderly widower says it all. Men—when they haven't found a new mate—can be at high risk for suicide in the older years.

To get insights into the depth of these feelings of loss, listen to these musings from a qualitative study of widowed men:

> "I feel I am in a long dark tunnel. . . . It's like a hole that rips through your soul."
>
> "My wife and I had . . . an ideal marriage, and when she was called home, I completely fell apart, not caring if I live or not."
>
> "Home was a place where I loved going to be with my dear wife. Now it's just a place to keep me out of the rain and cold."
>
> (from Silverman & Thomson, 2018, pp. 138–139, 144)

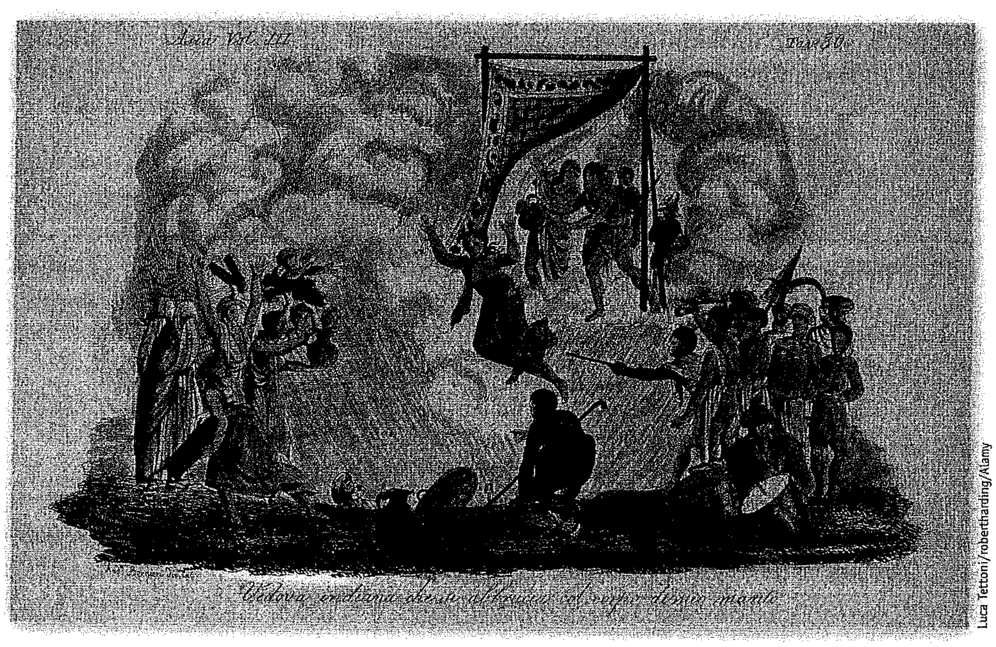
Still, men have one great advantage compared to women in overcoming these wrenching thoughts—their much higher chance of finding a new partner. To take just one example, 9 out of 10 men in a study that explored dating after widowhood were in new relationships. But only 1 out of 9 women who said they were interested in dating was able to find a new mate (Carr & Boerner, 2013)! Attend any U.S. boomer event at your local church and you might be struck by this strange thought: Have aliens swooped down and abducted the men?

However, rather than making generalizations based on gender, in predicting loved ones' reactions to widowhood, we must again adopt a *developmental systems approach* — that is, consider many forces. How emotionally resilient is the widowed person? Does that individual have a life passion or calling to cushion the blow? Is the person doubly burdened by dealing with a debilitating chronic disease? One fascinating study showed that serving in the military helped mute elderly widowers' pain, but, interestingly, only if a person had seen his buddies die in combat (Carr, Ureña, & Taylor, 2018). Again, confronting a trauma during earlier adulthood may confer resilience decades down the road (see Chapter 12).

Actually, we may be able to predict a spouse's adjustment to widowhood by looking at the deceased partner's quality of life! In tracking a subset of married couples who later lost a spouse, researchers were astonished to discover that if a widow's husband or wife had been upbeat, happy, and highly satisfied with life about four years earlier (presumably before getting ill), the surviving spouse was resilient after that person died (Bourassa and others, 2016). Having an uplifting, loving mate can emotionally float a survivor for life!

The overall environment makes a difference. In one study, researchers found that if older adults were living in an area with a high concentration of widowed people, their odds of dying after being widowed were reduced (Subramanian, Elwert, & Christakis, 2008). So, moving as a couple to a senior community with all those supportive widows and widowers has a survivor bonus in later life!

For women, it's important to live in an accepting culture — as one depressing study in India revealed. Before the British outlawed this practice in the early nineteenth century, according to Hindu tradition, widows were expected to engage in suttee, immolating themselves on a husband's funeral pyre, as depicted in the image below. They were implicitly blamed for a husband's death because, according to the doctrine of karma, losing one's spouse was punishment for having sinned in life. But, ironically, in one study conducted in a center where many young rural widowed women flocked, relying on religion helped mitigate the pain. These women reported that after a spouse's death, they felt closer to god. In an extreme case of "making lemonade out of lemons" (or a redemption sequence), they viewed their suffering as allowing them to get their lives on track for success in the next life.



Luca Tettoni/robertharding/Alamy

Table 13.5: Guidelines for Helping a Family Member Survive Widowhood

1. Expect your widowed relative to experience different emotions, and don't decide this person is uncaring for having positive feelings such as pride and a sense of relief.
2. Understand that loneliness is the major issue, and encourage new social connections. For women, the goal may be to find a good, widowed friend. Because men are at higher risk for depression (and suicide), pay special attention to older male family members who have lost a spouse.
3. Encourage your relative to join a widowed person's group, but only if this person seems isolated and distressed. Advise seeking professional help if *any* widowed family member stays seriously depressed for over a year.

Table 13.5 pulls together the main points of my discussion in guidelines for helping a widowed family member. As a final comment, if a parent dies, please let your surviving mother or father develop another romantic attachment! You might think that new relationships run into headwinds from children mainly after parents divorce (see Chapter 11). But, one study showed, when father–child bonds were somewhat ambivalent, daughters in particular were apt to get angry when their widowed dad had a new life love (Carr & Boerner, 2013). My experience when I found a new partner after my husband's death confirms this result. Why do you think some children (both daughters and sons) react so negatively when their widowed parent finds someone new to love?

Final Thoughts: On Socioemotional Selectivity Theory, Eudaimonic Happiness, and Identity

In writing this chapter, I realized how the messages of socioemotional selectivity, eudaimonic happiness, and the lifelong search for identity meld in later life: Socioemotional selectivity makes us passionate to focus on what gives us pleasure in our daily life. What makes people feel most upbeat during each day, as I described in Chapter 12, is acting according to our inner self. Therefore, ideally, socioemotional selectivity predicts that, during late life, we fully express our identity — the person we really are — in its purest form, which may explain the truth of that well-known stereotype: "People *do* become more like themselves" in their older years.

In Chapter 14, I'll be tracking this evolving self as we confront the frailties of old age.

Tying It All Together

1. Qiáng is an older worker who is approaching his retirement years. Based on this chapter, you can predict that Qiáng (*pick the false statement*):
   a. may get laid off prematurely even though he wants to stay on the job.
   b. may use retirement to further his bucket-list goals.
   c. should feel fulfilled just sitting on the beach and binging on Netflix during retirement.
2. Social Security provides a *lavish/meager* income that is *guaranteed by the government/ depends on personal investments*. (Select the correct options.)

3. To preserve Social Security, U.S. readers are apt to hear discussions about increasing the age of eligibility for getting full benefits to 70. Discuss the pros and cons of this controversial idea.
4. If your favorite aunt's husband recently died, you can expect her to feel (*choose one*): *mixed feelings of loss and self-efficacy/just sadness.* Now, based on this chapter, spell out some forces that will predict how well your aunt will cope.
5. Men — if they remain partnerless — have more difficulty coping with widowhood (*true/false*).

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

SUMMARY

Setting the Context

The **median age** of the population is rising due to declining fertility, longer life expectancies, and, of course, the baby boom. While **ageism** (negative stereotypes about elderly people) is universal, we also gravitate to older people for positive traits such as wisdom, and have contradictory old-age images partly because of the dramatic differences between being **young-old** and **old-old.**

Cognitive and Emotional Development

Everyone believes that as people get older, memory declines. Elderly people do perform less well than young people on most memory tasks. Memory challenges that are more difficult — such as linking faces to specific situations, remembering information quickly, and **divided-attention tasks** — produce the most severe deficits, and losses here begin at a surprisingly young age.

Using the information-processing approach, researchers find that as people age, working memory declines because executive functions such as selective attention are impaired. Using the **memory-systems perspective**, studies reveal few age-related losses in **semantic memory** or **procedural memory** but dramatic declines in **episodic memory.** To improve memory in old age (or at any age), use selective optimization with compensation, employ **mnemonic techniques,** and work on improving the person's mental state. Understand that emotionally meaningful events are remembered the best and when tests are labeled "for memory," older people may get too anxious to perform well. Teaching memory improvement strategies is helpful even in advanced old age.

Socioemotional selectivity theory suggests that in old age (or at any age), when people see their future as limited, they focus on maximizing the quality of their current life and prefer to spend time with their close attachment figures. This emphasis on enjoying the present, making each day meaningful, the late-life **positivity effect,** and lower daily stress explain the **paradox of well-being,** the fact that older people report high levels of happiness. Still, depression does become a serious risk when people are old-old, physically frail, and have lost their attachment figures. Reaching **integrity** is one theoretical late-life goal, but older people are happiest (and live longer) when they live a meaningful, purposeful life.

Social Development

The explosion of government-sponsored old-age income programs propelled retirement into a life stage, although these financial supports vary from nation to nation. Germany historically was a model of the ultimate in guaranteed, comfortable government support. In the United States, our main sources of retirement income are **Social Security, private pensions,** and savings. However, unlike in Germany, Social Security only provides a meager guaranteed income.

Older workers base retirement decisions mainly on financial considerations, but poor health can force people to leave work. **Age discrimination** in the workforce, although illegal, also forces people to retire. In our current economy, older workers are at risk of being prematurely laid off because they earn more. In contrast to the negative stereotypes, however, being older can make workers more competent at a job. People who can work into their seventies or eighties are typically healthy and well-educated, and can control the conditions of their much-loved work.

Retirees are happy when they have chosen to leave work and have few health and money worries, positive personality traits, and compelling leisure passions. People use these years to further a life calling, pursue other "bucket list" goals, and learn. It helps to have an enthusiastic fellow traveler (spouse) on this mind-expanding journey.

Baby boomers' inadequate pensions and savings, looming cuts to Social Security (partly due to the rising **old-age dependency ratio**), and age discrimination in the workforce are threats to an economically secure old age. Although reducing poverty for people over 65 was a remarkable late-twentieth-century U.S. success story, ethnic minorities, single women, and females who live into advanced old age are at risk of having serious economic problems during their older years. **Intergenerational equity** (over-benefiting elderly people) is a concern in nations where older people enjoy special government perks. However, we need to keep in mind that helping older people helps every age group thrive.

Widowhood is a top-ranking life stress, especially when it strikes people who have been married for their entire adult lives.

The early symptoms of bereavement have much in common with the separation response of an infant whose caregiver leaves the room. Rather than being an unmitigated trauma, however, losing a spouse evokes different emotions. Still, loneliness is a major issue, and the **widowhood mortality effect** suggests that this life loss can take a dramatic toll.

The stereotype that men are more at risk for having emotional problems after being widowed is true, unless they find a partner. People adapt by establishing new social routines and, for women in particular, connecting with a new close friend. Adjustment is easier for widows and widowers who live in retirement communities, and for people who had an upbeat, loving spouse. Personality resilience, following a life passion, socioeconomic status, and cultural forces shape the experience of widowhood, too. The most horrific example occurred in nineteenth-century India, where widows were expected to commit suicide after losing a spouse. Children need to allow widowed parents to develop new romantic attachments.

Socioemotional selectivity theory, the search for eudaimonic happiness, and the enduring quest for identity may explain why we become more like our "essential self" in old age.

KEY TERMS

age discrimination, p. 383
ageism, p. 368
divided-attention task, p. 370
episodic memory, p. 372
integrity, p. 379
intergenerational equity, p. 385
median age, p. 367
memory-systems perspective, p. 372
mnemonic technique, p. 374
old-age dependency ratio, p. 385
old-old, p. 368
paradox of well-being, p. 376
positivity effect, p. 376
private pensions, p. 382
procedural memory, p. 372
semantic memory, p. 372
Social Security, p. 381
socioemotional selectivity theory, p. 375
widowhood mortality effect, p. 387
young-old, p. 368

ANSWERS TO Tying It All Together QUIZZES

Setting the Context

1. positive and negative traits
2. the old-old years

Cognitive and Emotional Development

1. Ivan should present concepts more slowly (but not talk down to his audience) and refrain from presenting a good deal of information in a single session. He should tie the course content to older adults' knowledge base and make the material relevant personally. He might offer tips on using mnemonic techniques. He should continually work on reducing memory fears: "With your life experience, learning this stuff should be a piece of cake!"
2. (a) semantic memory; (b) episodic memory; (c) procedural memory

Sky View/DigitalVision/Getty Images; gregorydean/iStock/Getty Images; Jose Luis Pelaez Inc/KidStock/Getty Images

3. (a) Bike riding, that automatic skill, is "in" procedural memory, so it is maintained even into Alzheimer's disease. (b) Remembering the material in this chapter, since it is in the most fragile system (episodic memory), is apt to decline at a relatively young age.
4. The answers here are up to you.
5. (b) and (c)
6. Older people (1) focus on enjoying the present, (2) selectively screen out negativity, (3) prioritize meaningful activities, and (4) live less stressful lives.

Social Development

1. (c)
2. meager/guaranteed by the government
3. *Pros:* Raising the retirement age to 70 will keep Social Security solvent, encourage older people to be productive, and get society used to the fact that people function competently well into later life. *Cons:* Depriving people of this money will have the devastating consequence of putting some elderly people in dire economic straits.
4. You can expect mixed feelings of loss and self-efficacy. Forces that predict coping include having compelling interests, having had a loving marriage, living in a senior community, and developing a new close widowed friend.
5. true

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