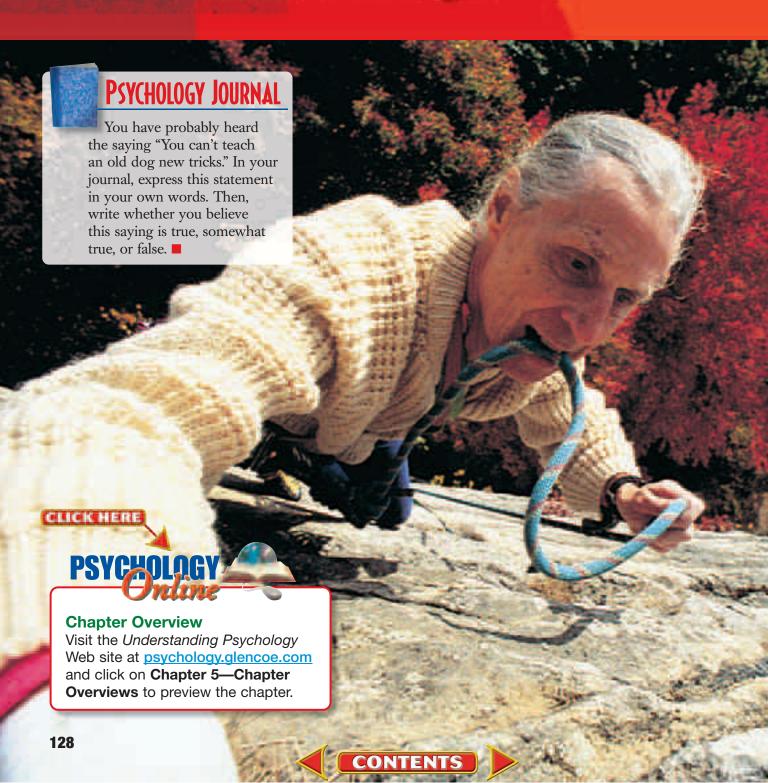


Adulthood and Old Age



Reader's Guide

■ Main Idea

Adulthood is a time of transition—it involves shifting priorities and outlooks on life from adolescence and throughout the remainder of life.

■ Vocabulary

- menopause
- generativity
- stagnation

Objectives

- Characterize the physical changes that take place during adulthood.
- Describe the social and emotional changes that occur during adulthood.

EXPLORING PSYCHOLOGY

Questions

I remember sitting in a restaurant in Nags Head, North Carolina, . . . A woman I barely knew came over to me. She shook my shoulder, got right in my face and said "Hey, hey. Did you just find out that life ain't fair? Hmmm?" All I could do was nod. I had lived to be forty years old. I was a child of an upper-middle-class family, blessed with good health, a good education, and endless possibilities. Now I was confronting age-old questions: "Where am I going with the rest of my life?" "Who am I?" I vaguely remembered asking these questions as a teenager but had forgotten the answers, if I ever knew them. After that I forgot to ask the questions.

—from Awakening at Midlife by Kathleen A. Brehony, 1996

ike the author above, many people face questions and adjustment in adulthood. What is adulthood like? For one thing, it is a period when opposite factors affect lives. There is change and sameness, success and failure, crisis and stability, joy and sadness. Adulthood can be a time when a person matures fully into what he or she is, or it can be a time when life closes in and what was once possibility is now limitation. How each of us reacts depends on our preparations, circumstances, and general outlook on life.

PHYSICAL CHANGES



One theory of aging claims that our bodies age as a result of break-downs in our bodies' cells. With time our bodies' cells become less able to repair themselves. Thus aging is the result of normal wear and tear on our bodies. Another theory says that our bodies age because our cells have preset biological clocks that limit the number of times cells can divide and multiply. As cells reach that limit, they begin to die, or the process of cell division occurs less accurately. Either way, aging occurs.

In general, young adults are at their physical peak between the ages of 18 and 30 (see Figure 5.1). This is the period when we are the strongest, healthiest, and have the quickest reflexes. For most adults, the process of physical decline is slow and gradual—not at all noticeable, even month to month. For example, a 20-year-old manages to carry four heavy bags of groceries, while a 40-year-old finds it easier to make two trips. What is lost physically may be replaced by experience. A 60-year-old racquetball player who is well versed in the game's strategies can compete with a faster, less experienced 30-year-old player.

In middle age, appearance changes. The hair starts to turn gray and perhaps to thin out. The skin becomes somewhat dry and inelastic, and wrinkles appear. In old age, muscles and fat built up over the years break down so that people often lose weight, become shorter, and develop more wrinkles, creases, and loose skin. Some physiological changes occur as we become older, while behavioral factors and lifestyles can affect psychological health.

The senses also change over time, requiring more and more stimulation. During their 40s, most people begin having difficulty seeing distant objects, adjusting to the dark, and focusing on printed pages, even if their eyesight has always been good. Many experience a gradual or sudden loss of hearing in their later years. In addition, reaction time slows. If an experimenter asks a young person and an older person to push a button when they see a light flash, the older person will take about 20 percent longer to do so.

Health Problems

Some of the changes we associate with growing older are the result of the natural processes of aging. Others result from diseases and from simple disuse and abuse. Good health reflects a life of making choices, which involve exercise, diet, and lifestyle. A person who eats sensibly, exercises, avoids cigarettes, drugs, and alcohol, and is not subjected to severe emotional stress will look and feel younger than someone who neglects his or her health.

More About...

The Cohort Effect

Suppose you were asked to measure the performance of trains at various points along a busy route. How would you go about it?

You might adopt a longitudinal approach. You would board a train and stay with it for its entire journey, recording your observations along the way. Alternatively, you might employ a cross-sectional strategy. You would ask observers stationed at key points to report on the performance of various trains that pass by.

Psychologists who study the behavior of people as they progress through adulthood and old age face a similar task. Since this journey can last decades, few researchers adopt a purely longitudinal approach. Instead, most conduct cross-sectional studies in which they can measure different age groups, or cohorts, together at one time.

However, people from different cohorts have different experiences in a number of important areas, including quality of education, nutrition, career opportunities, and social values. Their different backgrounds make it difficult to determine how age affects human abilities, attitudes, and even health.



Three of the most common causes of death in later adulthood—heart disease, cancer, and cirrhosis of the liver—may be encouraged by the fast-moving lifestyle of young adults. Drug abuse—likely to peak in late adolescence or young adulthood and drop sharply after that—is a problem. Other factors contributing to early morbidity are inadequate diet and the effects of violence. Violent deaths may result from accidents, a tendency to push the physical limits, and a social environment that encourages risk taking among young adults (Miedzian, 1991). All three of these contributing factors are psychological, although they ultimately have biological consequences.

Menopause

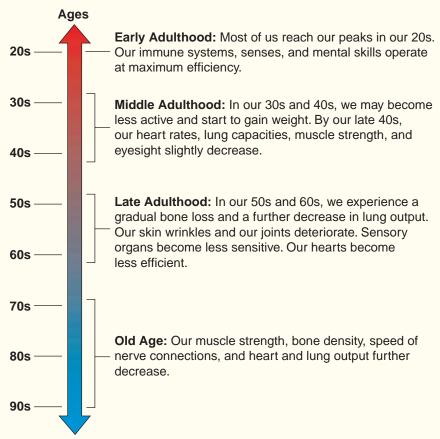
Between the ages of 45 and 50, every woman experiences a stage called the climacteric, which rep-

resents all of the psychological and biological changes occurring at that time. A woman's production of sex hormones drops sharply—a biological event called **menopause**. The woman stops ovulating (producing eggs) and menstruating and therefore cannot conceive children. However, menopause does not cause any reduction in a woman's sexual drive or sexual enjoyment. Many women experience little or no discomfort during menopause. The irritability and severe depression some women experience during the climacteric, however, appear to have an emotional rather than physical origin.

One study shows that the negative effects of menopause are greatly exaggerated. Women are also undergoing environmental changes in roles and relationships at this time. Half of the women interviewed said they felt better, more confident, calmer, and freer after menopause than they had before. They no longer had to think about their periods or getting pregnant. Their relations with their husbands improved, and they enjoyed sex as much as or more than they had before. Many said the worst part of menopause was not knowing what to expect (Neugarten et al., 1963).

How Our Bodies Age Figure 5.1

When young adults reach their 20s, they have reached the level of highest physical ability and capacity. What are some theories as to why our bodies age?



menopause: the biological event in which a woman's production of sex hormones is sharply reduced

Men do not go through any biological change equivalent to menopause. The number of sperm a man's body produces declines gradually over the years, but men have fathered children at an advanced age. It appears as if men generally go through psychological changes related to expectations about work, the death of parents, illness, and aging.

Marriage and Divorce

About 90 percent of adults in the United States will marry at some time in their lives. Forty to sixty percent of new marriages, though, end in divorce. What makes a marriage last? Researchers who have performed longitudinal studies on married couples have proposed that success or failure largely depends on two factors: how couples handle conflicts and how often couples share intimate and happy moments.

Although happily married couples seem to argue just as much as unhappy couples, they argue more constructively. They listen to each other and focus on solving the problem. They also show respect for each other's views. Unhealthy ways of dealing with conflict include ignoring or denying conflict, exaggerating issues, and having ugly verbal fights.

Sexual Behavior

Is there sex after 40? Studies have shown that sexual activity does not automatically decline with age. Indeed, as sex researchers William Masters and Virginia Johnson point out, there is no physiological reason for stopping sexual activity with advancing age (1970). Most older people who have an available partner maintain quite vigorous sex lives.

Marriage Figure 5.2

Many people, like this couple in India, marry in young adulthood. It is an Amish tradition for the father to adjust the height of this courting candle. His daughter must return from her date before the candle burns down to the first rung. How are conflicts resolved in happy marriages?

Those who are inactive cite boredom with a partner of long standing, poor physical condition or illness (such as heart disease), or acceptance of the stereotype of loss of sex drive with aging (Mulligan & Moss, 1991).

COGNITIVE CHANGES

People are better at learning new skills and information, solving problems that require speed and coordination, and shifting from one problemsolving strategy to another in their mid-20s than they were in adolescence (Baltes & Schaie, 1977). These abilities are considered signs of intelligence and are among the skills that intelligence tests measure.

> At one time many psychologists thought that intellectual development reached a peak in the mid-20s and then declined. The reason was that people do not score as high on intelligence



tests in middle age as they did when they were younger—a cohort effect. Further investigation revealed that some parts of these tests measure speed, not intelligence (Bischof, 1969). An adult's reaction time begins to slow after a certain age. Intelligence tests usually penalized adults for this.

Even with a decline in speed, people continue to acquire information and to expand their vocabularies as they grow older. The ability to comprehend new material and to think flexibly improves with years and experience. This is particularly true if a person has had higher education, lives in a stimulating environment, and works in an intellectually demanding career. One researcher studied more than 700 individuals who were engaged in scholarship, science, or the arts. Although the patterns varied from profession to profession, most of the participants reached their peaks of creativity and productivity in their 40s

(Dennis, 1966), but in the humanities, such as history, foreign languages, and literature, most reached their peaks later in their 60s.

Did You Know?

Arranged Marriages While most American couples marry for love, people in many other parts of the world follow the tradition of having marriages arranged. Arranged marriages often prove more lasting than ones based on love because the society usually disapproves of breaking up an arranged union. Some researchers also believe that the union lasts longer because each person enters the union without expectations of personal happiness. Such arranged marriages usually provide strong family ties and, therefore, support on both sides.

SOCIAL AND PERSONALITY DEVELOPMENT

An individual's basic character—his or her style of adapting to situations—is relatively stable over the years. Researchers are also convinced, however, that personality is flexible and capable of changing as an individual confronts new tasks. A number of researchers have given the same attitude and personality tests to individuals in late adolescence and again 10 or 15 years later. Many of the participants believed that they had changed dramatically, but the tests indicated that they had not. The degree of satisfaction they expressed about themselves and about life in general in their middle years was consistent with their earlier views. Confident young people remained confident; self-haters, self-hating; passive individuals, passive—unless something upsetting had happened to them, such as a sudden change in economic status (Kimmel, 1980).

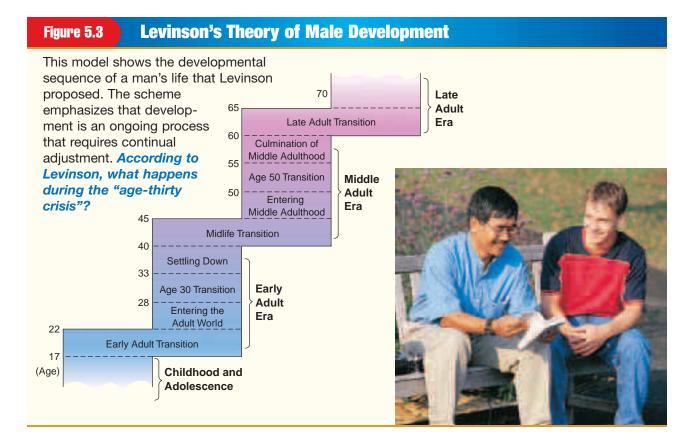
Despite the stability of character, people do face many changes in their lifetimes and adjust accordingly. Adults encounter new developmental tasks, just as adolescents do. They too must learn to cope with problems and deal with new situations. Learning the skills needed to cope with change seems to occur in stages for both adult males and females.

Levinson's Theory of Male Development

Daniel Levinson proposed a model of adult development for men (see Figure 5.3). Notice the similarity between Levinson's eras and the last three of the eight stages of Erikson's psychosocial theory, which was discussed in Chapter 3. Between these eras, Levinson identified important transition periods at ages 30, 40, 50, and 60 that last approximately 5 years.







Entering the Adult World From about age 22 to age 28, the young man is considered, both by himself and by society, to be a novice in the adult world—not fully established as a man, but no longer an adolescent. During this time, he must attempt to resolve the conflict between the need to explore the options of the adult world and the need to establish a stable life structure.

The Age-Thirty Crisis Levinson's data reveal that the years between 28 and 30 are often a major transitional period. The thirtieth birthday can truly be a turning point; it could be called the "age-thirty crisis." During this transitional period, the tentative commitments that were made in the first life structure are reexamined, and many questions about the choices of marriage partner, career, and life goals are reopened, often in a painful way. The man feels that any parts of his life that are unsatisfying or incomplete must be attended to now, because it will soon be too late to make major changes.

Settling Down The questioning and searching that are part of the agethirty crisis begin to be resolved as the second adult-life structure develops. Having probably made some firm choices about his career, family, and relationships, the man now begins actively carving out a niche in society, concentrating on what Levinson calls "making it" in the adult world.

Levinson found that near the end of the settling-down period, approximately between the ages of 36 and 40, there is a distinctive



BOOM phase—"becoming one's own man." Now it is time to become fully independent. During this period, the man strives to attain the seniority and position in the world that he identified as his ultimate goal at the beginning of the settling-down period.

The Midlife Transition At about age 40, the period of early adulthood comes to an end and the midlife transition begins. From about age 40 to age 45, the man begins again to ask questions, but now the questions concern the past as well as the future. He may ask: "What have I done with my life?" "What have I accomplished?" "What do I still wish to accomplish?" During this transition, he begins to develop yet another life structure that will predominate during the period of middle adulthood.

Often a successful midlife transition is accompanied by the man's becoming a mentor to a younger man. This event signals the attainment, in Erik Erikson's terms, of generativity. By generativity, Erikson means the desire to use one's wisdom to guide future generations—directly, as a parent, or indirectly. The opposite—stagnation—can also occur. Generativity or stagnation occurs for both men and women. An adult may choose to hang on to the past, perhaps by taking part in the same sports or hobbies. On the other hand, the same adult may become preoccupied with his health or bitter about the direction his life has taken.

Middle Adulthood The late 40s is a time when true adulthood can be achieved. The man who finds satisfactory solutions to his life's crises reaches a period of stability. He understands and tolerates others, and he displays a sensitivity and concern for other people as people. He is able to strike a balance between the need for friends and the need for privacy.

For the man who is not as fortunate, this period can be a time of extreme frustration and unhappiness. Instead of generativity, there is stagnation; instead of change and improvement, there is a mood of resignation to a bad situation. The job is only a job. The individual may feel cut off from family and friends, and the future holds no promise. By avoiding this life crisis, he is only inviting a later appearance of it, at age 50, with a more crushing force (Rogers, 1979). Keep in mind that Levinson's eras and transitions are based on averages from many individual interviews. Nobody's life is likely to match Levinson's divisions exactly.

Female Development

While there have been far more studies conducted among men than among women, some researchers have focused their attention on women's midlife development. While many men experience a crisis at midlife, married women at midlife may be facing fewer demands in their traditional task as mother. For many, this means greater personal freedom. As a result, they may be reentering the workforce, going back to college, or starting or renewing careers outside the home. Rather than a time of crisis, it is a time of opportunity for those who opted to have a family first. Evidence generally does not support the existence of a midlife crisis for most women in today's world (Berger, 1994).



Student Web Activity

Visit the *Understanding* Psychology Web site at psychology.glencoe.com and click on Chapter 5-Student Web Activities for an activity about adult development.



generativity: the desire, in middle age, to use one's accumulated wisdom to guide future aenerations

stagnation: a discontinuation of development and a desire to recapture the past



Do men and women go through the same stages of development?

The latest studies show that just as during adolescence, men and women also go through stages of development during adulthood. Are their experiences the same?

Procedure

- 1. Prepare a list of interview questions that address a person's attitudes about work, family relationships, and importance of physical attractiveness.
- 2. Arrange to interview, separately, a man and a woman who are middle-aged; explain the purpose of your interview to them.

- 1. What differences in attitudes or feelings did you detect between the man and the woman?
- **2.** Based on your interviews, do you think men and women go through different stages of adult development? Explain. As a class compare your conclusions.

See the Skills Handbook, page 622, for an explanation of designing an experiment.

The "Empty Nest" Syndrome A significant event in many women's lives is the departure from home of the last child. Contrary to popular belief, this event need not be traumatic. In fact, many women find that the period after the children are grown is one of the happiest of their lives. If they have not already done so, they reorganize their lives by focusing on new interests and activities (Grambs, 1989).

Of course, not all women experience the same sense of new freedom. Psychologists have found that a stable marriage makes a difference. If a woman has a warm relationship with her husband, she may find the adjustment easier because of his support. If the woman is widowed or divorced, the transition can be much more difficult.

Depression in Midlife Depression can affect people of all ages, but it is most common among middleaged women. During the early years of a woman's life, she may derive a sense of personal worth from her roles of daughter, lover, wife, mother and wage earner. These relationships change as children grow, parents die, or marriages fail. Some women begin to experience a sense of loss and personal worthlessness. The onset of menopause can trigger depression. Those who have defined themselves as childbearers now view themselves as useless. Other women welcome this time of life. Career women can draw a new sense of selfesteem from their work environment. Some women in their 50s find that the nature of their marriage changes when they no longer have to focus their attention on the needs of their children.



Assessment

- 1. Review the Vocabulary What is menopause? What physical reactions does it cause?
- 2. Visualize the Main Idea Use a flowchart similar to the one below to summarize Levinson's theory of male development.

Levinson's Theory of Male Development



- **3. Recall Information** How do generativity and stagnation affect a person's midlife transition?
- **4. Think Critically** How do the intelligence abilities of young adults and older adults differ?
- 5. Application Activity Create a comparison chart of challenges faced by adults and adolescents. Include illustrations and real-life examples.



Reader's Guide

■ Main Idea

As we age, our priorities and expectations change to match realities, and we experience losses as well as gains.

■ Vocabulary

- decremental model of aging
- ageism
- senile dementia
- Alzheimer's disease

Objectives

- Identify changes that occur in health and life situation during old age.
- Summarize how people physically, mentally, and socially adjust to old age.

EXPLORING PSYCHOLOGY

Be Suspicious

Be suspicious if you are told ill health is what you can expect at your age. Remember the man of 104 who, when he complained of a stiff knee, was told, "After all, you can't expect to be agile," and replied, "My left knee's 104, too, and that doesn't hurt."

—from Say Yes to Old Age: Developing a Positive Attitude Toward Aging by Alex Comfort, 1990

any people believe that experiencing problems in old age is inevitable. In one big-city newspaper, the photograph of a man celebrating his ninetieth birthday was placed on the obituary page. Is this only one newspaper editor's view on aging? Perhaps, but unfortunately, many people tend to regard old age as being just one step away from the grave. Indeed, some would rather die than grow old.

The fear of growing old is probably one of the most common fears in our society. We are surrounded with indications that aging and old age are negative—or at best something to ridicule. Birthday cards make light of aging; comedians joke about it. Advertisements urge us to trade in older products for the newer, faster model. We encourage older workers to retire—whether or not they want to retire—and replace them with younger people. Many do not even want to use the word old and instead refer to "golden agers" and "senior citizens."

ATTITUDES TOWARD AGING

decremental model of aging: idea that progressive physical and mental decline are inevitable with age

ageism: prejudice or discrimination against the elderly

Many of our attitudes about aging are based on a **decremental** model of aging, which holds that progressive physical and mental decline is inevitable with age. In other words, chronological age is what makes people "old." In fact, there are great differences in physical condition among the elderly, depending on their genetic makeup and environment. Many of us know people who are 80 and look and act 50, and vice versa. The prevalence of the decremental view in our society can be explained in part by ignorance and a lack of contact with older people. The result is a climate of prejudice against the old. A researcher coined the word ageism to refer to this prejudice. As with racism and sexism, ageism feeds on myths rather than facts.

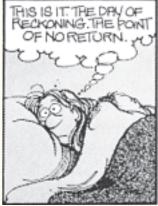
Young people tend to believe that the old suffer from poor health, live in poverty, and are frequent victims of crime. The elderly seldom see these as personal problems, though; interestingly, they tend to think of them as problems for other older people (Harris, 1978). Such beliefs, however, affect stereotypes of the elderly.

The notion that the aged withdraw from life and sit around doing nothing is also very common. This, too, is a false picture. There are many musicians and actors who are good examples of active older individuals, and many less well-known older people follow their lead. The majority of older Americans work or wish to work either for pay or as volunteers. Stereotypes perpetrate widespread misconceptions about older people.

One misconception is the notion that older people are inflexible or senile. Actually, rigidity is more a lifelong habit than a response to aging. The older person who tends to be rigid was probably rigid as a young adult. Senility, which affects only 10 percent of the aged, usually results from some disease rather than from the natural process of aging.

Figure 5.4 Views of Growing Older









For Better or For Worse reprinted by permission of United Feature Syndicate, Inc.

Despite the negative attitudes associated with growing older, many people find their forties, fifties, and older years rewarding periods of life. How does this cartoonist view the process of aging?



CHANGES IN HEALTH

Physical strength and the senses decline about 1 percent a year through adulthood. Though most people over 65 consider themselves in good health, about one-fourth of the U.S. population is obese (Haggerty, 2001). Good health in adolescence and adult life carries over into old age. Eating habits and exercise influence patterns of health and disease. Today's emphasis on healthy lifestyles will also lead to physical wellness in old age.

All people, young and old, are subject to disease, though. About 40 percent of the elderly have at least one chronic disease (a permanent disability as opposed to an acute or temporary disability more common with younger people). The four most prevalent chronic diseases are heart disease, hypertension, diabetes, and arthritis. In general, the major causes of death among the old are heart disease, cancer, and strokes. Most older people, though, believe their health is good. Nearly three-fourths of the noninstitutionalized people aged 65 to 74 years old and twothirds of those 75 and older rate their health as good (U.S. Bureau of the Census, 1995).

The quality of health care for the elderly remains by and large inferior to that of the general population. The reasons for this are numerous. The elderly in the lower socioeconomic class tend not to take care of themselves or to seek out treatment when needed. Some doctors may prefer to administer to younger patients with acute

diseases rather than to older patients with long-term chronic conditions that can only be stabilized, not cured. Some doctors hold stereotypical views of the aged that can lead to misdiagnosis and improper treatment.

For the 1 million old people who are no longer able to care for themselves, there are institutions (but only 15 percent of males and 25 percent of females live in nursing homes). Too many of these nursing homes, however, have inadequate facilities. As more and more people each year reach late adulthood, it is paramount that there be a general overhaul of health care treatment and facilities for the elderly.

CHANGES IN LIFE SITUATION

For younger people, transitions in life—graduation, marriage, parenthood—are usually positive and create a deeper involvement in life. In late adulthood, transitions—retirement, widowhood—are often negative and



A larger percentage of people in our society are living to more advanced ages. As a result, the elderly exert an increasing influence. How does a person's health change with age?





reduce responsibilities and increase isolation. Perhaps the most devastating transition is the loss of a spouse. About 50 percent of women and 20 percent of men are widowed by the age of 65. By the age of 80, one-third of men and 7 out of 10 women are alone. Across the entire age spectrum, there are six widows for every widower (U.S. Census Bureau, 1998). All too often, the person loses not just a spouse but the support of friends and family, who cannot cope with the widowed person's grief or feel threatened by the survivor's new status as a single person.

The symptoms of depression are very common in older adults. Many older people have suffered because of life challenges such as aging and loss of spouses and friends. Symptoms such as weight changes, feelings of worthlessness, extreme sadness, inability to concentrate, and thoughts of death and suicide are often cited. Depression is caused by many factors, such as genetic predisposition, family heritage, an unhealthy lifestyle, poor nutrition, lack of exercise, loneliness, and stress.

On the positive side, older people continue to learn and develop skills more than ever before. Some people attend night school, local adult education classes, or learn about computers. It has become clear that in older adults some abilities such as nonverbal tasks and problem solving may decline, but other abilities remain normal and some improve with age.

More About...

Growing Old

America's old people may not be given much respect because they often lack status. Many occupy the lower rungs of the economic ladder and go without adequate medical care. In Japan that situation rarely develops because the able-bodied continue to work or to help their families in the home. In addition, they are guaranteed a minimum income, receive free annual health examinations, and are eligible for completely free medical care after age 70.

The Japanese also fully integrate the elderly into their daily lives. In Japan about 75 percent of the old live with their children, as opposed to only 25 percent in the United States. For those who do live alone, the Japanese have established programs to assure that they receive daily visits or calls. To encourage the active involvement of all older citizens in social activities, the government subsidizes Elders Clubs and sports programs. Through these programs the aged supply each other with mutual support and gain a sense of self-pride.

CHANGES IN SEXUAL ACTIVITY

Just as young people tend to think sexual activity diminishes at midlife, they often believe it ceases altogether in old age. Yet the majority of people over the age of 65 continue to be interested in sex, and healthy partners enjoy sexual activity into their 70s and 80s. One psychologist commented that "Sexy young people mature into sexy middle-aged and elderly people" (Allgeier, 1983). As with so many human behaviors, the best predictor of future behavior is past behavior. For the elderly with an available partner, the frequency and regularity of sexual activities during earlier years are the best overall predictor of such activities in later years. The reasons some do not engage in sexual activity apparently are related to poor health or the death of a spouse, rather than to a lack of interest or to sexual physiology and functioning. Societal attitudes are another factor that discourages sexual expression by the elderly. Old people are not supposed to be interested in sex or be sexually active. Sexual relationships in old age—and even displays of affection—are often considered silly, improper, or even morally wrong.

People who grow old in this atmosphere may give up sexual activity because they are "supposed to." On a more personal level, older people often encounter opposition from family and friends if they want to remarry



after the death of a spouse. Children and family, too, find the idea of love and sex in old age ridiculous or even vaguely disgusting. A change in our ideas may enable a large segment of our population to continue to enjoy a guilt-free, healthy sex life in old age.

ADJUSTING TO OLD AGE

Many of the changes the elderly face make their adjustment to everyday life more difficult because they represent a loss of control over the environment. When older people are unable to maintain what they value most-good health, recognition in the community, visits from family and friends, privacy, leisure and work activities—the quality of their lives suffers dramatically, along with their self-image.

The loss of control is usually gradual, and it may involve both physical changes (becoming sick or disabled) and external circumstances (moving to a nursing home). Losing a husband is terrible enough, but the burden is only made worse by the further losses of friends and one's house. Those who experience a loss of control often de-

velop a negative self-concept. They can regain a sense of control and a more positive self-image if they are helped to make the best of the options available to them. People with assertive personalities are often better at coping with life changes than more passive individuals because they are better able to demand and get the attention they need.

In order to help old people adjust, society must make some basic changes. Older people are beginning this process themselves by supporting organizations such as the AARP (American Association of Retired Persons). These groups speak out and lobby on social issues of importance to them. Since the population over 65 is constantly growing, social policy will have to take the elderly into consideration more and more (see Figure 5.6). Attitudes toward old people are already slowly changing. Eventually a time will come when old age will be considered the culmination of life, not simply the termination.

CHANGES IN MENTAL FUNCTIONING

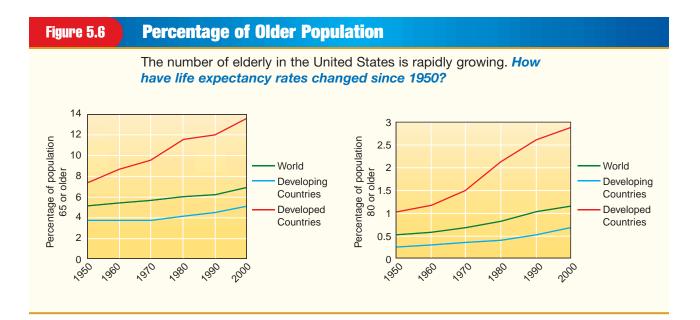
As people age, there are also changes in many of the mental functions they use, although there is much less decline in intelligence and memory than people think. If you compare measures of intellectual ability for a



The average age in North America continues to creep upward. That is bad news for the smaller number of children being born and growing up now as they plan for their own retirement. Today's retirees can count on Social Security for funds—but will those funds be there when you retire? Social Security is not a personal retirement program; it is a tax-supported benefit. What workers pay in as a salary tax is paid right back out to today's retirees as a benefit.

As the number of older people increases and the number of people in the workforce does not, two things are happening. Social Security taxes are increasing, and full retirement benefits, formerly available at age 65, will not be available until age 67, by the time you retire. Today's workers—this means you—need to be finding other funding sources for their retirement.





group of elderly people with similar measures for younger people, you might see a difference—namely that older people do not score as well on intellectual tests. However, the older group of people will most likely be less educated and less familiar with test taking than younger people. Furthermore, there are many different types of mental skills and abilities that combine to produce intellectual functioning, and these abilities do not develop at the same rate or time across the life span. Factors such as physical health, vision, hearing, coordination, the speed or timing of intelligence testing, and attitudes in the testing situation all affect intelligence test scores.

John Horn (1982) has proposed two types of intelligence: crystallized and *fluid* intelligence. Crystallized intelligence refers to the ability to use accumulated knowledge and learning in appropriate situations. This ability increases with age and experience. Fluid intelligence is the ability to solve abstract relational problems and to generate new hypotheses. This ability is not tied to schooling or education and gradually increases in development as the nervous system matures. As people age and their nervous systems decline, so does their fluid intelligence. Thus, older people may not be as good at problems that require them to combine and generate new ideas. A decline in the nervous system affects reaction time, visual motor flexibility, and memory (see Figure 5.7). Elderly people have difficulty retrieving information from memory. If they are asked to recognize a familiar name or object, they cannot do so as well as younger people.

Senile Dementia

A small percentage of people develop senile dementia in old age. Senile dementia is a collective term that describes conditions characterized by memory loss, forgetfulness, disorientation of time and place, a decline in the ability to think, impaired attention, altered personality, and

senile dementia: decreases in mental abilities experienced by some people in old age



difficulties in relating to others. Dementia has many causes—some forms are treatable, whereas others are not at this time.

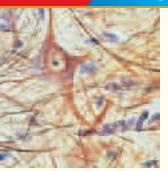
Alzheimer's Disease The most common form of senile dementia is Alzheimer's disease. Alzheimer's disease is an affliction more commonly seen among the elderly. About 4 million people have this disease, and problems associated with it are the fourth leading cause of death among U.S. adults.

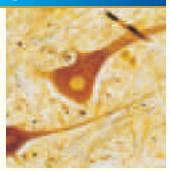
Alzheimer's is a neurological disease marked by a gradual deterioration of cognitive functioning. Early signs of the disease include frequent forgetting, poor judgment, increased irritability, and social withdrawal. Eventually Alzheimer's patients lose their ability to comprehend simple questions and to recognize friends and loved ones. Ultimately they require constant supervision and custodial

care, often from trained professionals. Rarely do patients die from the disease itself, but their weakened state leaves them vulnerable to a variety of other potentially fatal problems.

The causes of Alzheimer's are complex and still not completely understood. Genetic susceptibility plays a role. Other causes may involve life events. At present there is no cure for the disease. Many patients and their caretakers (usually their families) are offered supportive therapy that helps them learn to accept the relentless progression of the disease and the limitations it imposes on its victims.

The Aging Brain Figure 5.7





At left is a microscopic image of neurons (nerve cells) in the cerebellum (brain) of a young adult. At right is an image of neurons in an older adult. Notice that the branching of the dendrites decreases, reducing the connections between neurons. What effects do aging neuron connections have on older people?

> Alzheimer's disease: a condition that destroys a person's ability to think, remember, relate to others, and care for herself or himself

SECTION 2

Assessment

- **1. Review the Vocabulary** Describe the decremental model of aging. Is this an accurate model of aging? Explain.
- **2. Visualize the Main Idea** Use a graphic organizer similar to the one below to list and define the two types of intelligence.

- 3. Recall Information How do life transitions in late adulthood differ from those in early adulthood?
- **4. Think Critically** How might a person differentiate between Alzheimer's disease and changes in mental processes as a result of aging?
 - 5. Application Activity Create a "to-do" list that will help you successfully adjust to old age.



Dying and Death

Reader's Guide

■ Main Idea

Death is inevitable. Most people face death by going through stages or an adjustment process.

■ Vocabulary

- thanatology
- hospice

■ Objectives

- Identify the stages of dying.
- Describe the services of hospices.

EXPLORING PSYCHOLOGY

Thinking About Death

Goodbye Papa, it's hard to die When all the birds are singing in the sky Now that the spring is in the air Little kids are everywhere Think of me and I'll be there.

—from "Seasons in the Sun" by Terry Jacks

ying and death are popular subjects for many poets and songwriters. Why does death mystify us? Death is inevitable. Death is not just biological. When a person dies, there are legal, medical, psychological, and social aspects that need attention. It is not very easy to even define death anymore because there are medical advances that cloud this issue.

Biological death becomes entangled with social customs. These customs include cultural attitudes toward death, care of the dying, the place of death, and efforts to quicken or slow down the dying process. Death also has social aspects, including the disposal of the dead, mourning customs, and the role of the family. These social and cultural aspects of death are intertwined with our own thoughts and values about dying and death. Death may sound simple, but culturally it may be complex and confusing.

ADJUSTING TO DEATH

Once terminally ill patients have been informed of their condition, they must then cope with their approaching death. Elisabeth Kübler-Ross (1969) did some pioneering work on how the terminally ill react to their impending death. Her investigations made a major contribution in establishing **thanatology**—the study of dying and death. Based on interviews with 200 dying patients, she identified five stages of psychological

thanatology: the study of dying and death



adjustment. The first stage is denial. People's most common reaction to learning that they have a terminal illness is shock and numbness, followed by denial. They react by saying, "No, it can't be happening to me," or "I'll get another opinion." They may assert that the doctors are incompetent or the diagnosis mistaken. In extreme cases, people may refuse treatment and persist in going about business as usual. Most patients who use denial extensively throughout their illness are people who have become accustomed to coping with difficult life situations in this way. Indeed, the denial habit may contribute to the seriousness of a condition. For example, a person might refuse to seek medical attention at the onset of the illness, denying that it exists.

During the second stage, anger, the reaction of dying people is "Why me?" They feel anger—at fate, at the powers that be, at every person who comes into their life. At this stage, they are likely to alienate them-

selves from others, for no one can relieve the anger they feel at their shortened life span and lost chances.

During the stage of bargaining, people change their attitude and attempt to bargain with fate. For example, a woman may ask God for a certain amount of time in return for good behavior. She may promise a change of ways, even a dedication of her life to the church. She may announce that she is ready to settle for a less threatening form of the same illness and begin to bargain with the doctor over the diagnosis. For example, if she submits gracefully to some procedures, might she be rewarded by being spared the next stage of the illness? This stage is relatively short and is followed by the stage of depression.

During depression, dying people are aware of the losses they are incurring (for example, loss of body tissue, loss of job, loss of life savings). Also, they



Profiles In Psychology

Elisabeth Kübler-Ross

1926-

"If you have lived fully, then you have no regrets, because you have done the best you can. If you made lots of goofs much better to bave made lots of goofs than not to have lived at all,"

s a young woman, Dr. Kübler-Ross visited a concentration camp in Maidanek, Germany, during

World War II. There she spoke to a young Jewish woman who had just lost her entire family in a gas chamber. This woman was supposed to be the last one in the chamber, but there was not room, so she was spared. When Kübler-Ross asked how Nazi leader Adolf Hitler could commit such atrocities, the woman replied that there is a Hitler in every human. Kübler-Ross came to understand that depending on the circumstances, anyone could do horrible things.

After that experience Kübler-Ross sought to understand humans and human death. This eventually led her to develop a theory on the stages of dying. As a result of her studies, many people have been able to come to terms with death and help others die in peace.

are depressed about the loss that is to come: they are in the process of losing everybody and everything. Kübler-Ross suggests that it is helpful to allow such people to express their sadness and not to attempt to cover up the situation or force them to act cheerfully.

Finally, patients *accept* death. The struggle is over, and they experience a sense of calm. In some cases, the approach of death feels appropriate or peaceful. They seem to become detached intentionally so as to make death easier.

Not all terminal patients progress through the stages that Kübler-Ross describes. Some people may go through the stages but in different order, or they may repeat some stages. Critics note that individuals are unique and sometimes do not follow predictable patterns of behavior. For example, a person may die in the denial stages because he or she is psychologically unable to proceed beyond it or because the course of the illness does not grant the necessary time to do so. Kübler-Ross notes that patients do not limit their responses to any one stage; a depressed patient may have recurring bursts of anger. All patients preserve the hope that they may live after all. Camille Wortman and others have argued that Kübler-Ross's stages may simply identify the five most common styles of dealing with death, with no need to progress through stages.

Most people have trouble dealing with the thought of their own death, and they also find it difficult to deal with the death of others. What should we do when a loved one is approaching death? Like all people, dying people need respect, dignity, and self-confidence. Dying people need support and care. They require open communication about what is happening and help with legal and financial arrangements. What should we do after a loved one has died? Our society has developed certain standards that provide guidance on this point. For instance, in the 1800s, a widow or

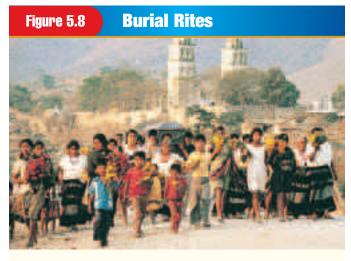
widower was expected to grieve for a long time. Today society encourages people to try to get back to their normal lives (Stroebe et al., 1992). How long a person grieves depends on the person who is grieving.

Hospices

Discussing death is one of the few taboos left in twenty-first century America. The breakdown of extended families and the rise of modern medicine have insulated most people in our society from death. Many people have no direct experience with death, and partly as a result, they are afraid to talk about it. In 1900 the average life span was less than 50 years, and most people died at home. Today, most Americans live until at least 75, and they die in nursing homes and hospitals. Machines can prolong existence long after a person has stopped living a normal life.

Reading Check
Why do some people
criticize Kübler-Ross's stages

of dying?



The ceremonies associated with death in many cultures, like the Mexican culture, help people start to work through the grieving process. *How might funeral ceremonies force people to confront and accept the death of a loved one?*



A movement to restore the dignity of dying revolves around the concept of the hospice—usually a special place where terminally ill people go to die. The hospice is designed to make the patient's surroundings pleasant and comfortable—less like a hospital and more like a home. Doctors in hospices do not try to prolong life but to improve the quality of life. A key component of hospice care is the use of tranquilizers and other drugs to ease discomfort and relieve pain. The patient in a hospice leads the most normal life he or she is able to do and is taken care of as much as possible by family members. If it can be arranged, a patient may choose to leave the hospice and die at home.

Another form of hospice service is becoming part of the mainstream of the health care system of the United States. This program features care for the elderly at home by visiting nurses, aides, physical therapists, chaplains,

and social workers. Medicare now includes arrangements for providing and financing these hospice services. Many other insurance policies also include provisions for in-home hospice care and respite care. Growing rapidly in recent years, home-based hospice care is now a more frequently used service than inpatient hospice care in the United States.

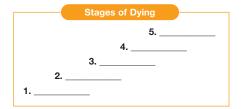


The staff of a hospice responds to the unique needs of the terminally ill by providing physical and emotional care. How does hospice care help a person die with dignity?

> hospice: a facility designed to care for the special needs of the dying

Assessment Assessment

- 1. Review the Vocabulary Explain why thanatology is a subfield of psychology.
- 2. Visualize the Main Idea Using a diagram similar to the one below, list Kübler-Ross's stages of dying.



- **3. Recall Information** What do people go through during the denial stage of dying?
- **4. Think Critically** Do you think that Kübler-Ross's stages of dying apply to other types of losses (such as in sports or a romantic breakup)? Explain.
 - 5. Application Activity Research to find information on hospices and nursing homes. Evaluate the services these institutions provide and determine what services you would want if you needed to spend time in one of these places.

Case Studies

Psychologically Able to Decide?

Period of Study: 1960-ongoing

Introduction: In April 1999, a Michigan court jury sentenced Dr. Jack Kevorkian, a pathologist, to 10 to 25 years in prison. The conviction was based on Kevorkian's role in the assisted suicide of a 52-year-old man who suffered from Lou Gehrig's disease.

Kevorkian provided his "patient" with lethal drugs. The doctor claimed he had used this "method" about 130 other cases. Kevorkian argued that the assisted suicides he performed were methods of euthanasia. Euthanasia is allowing a terminally ill patient to die naturally without life support, or putting to death a person who suf-

fers from an incurable disease (Rice, 1995). The Michigan jury who sentenced Kevorkian ruled that Kevorkian was guilty of murder because he had injected the lethal drugs directly into his patient. (The Lou Gehrig's disease sufferer was unable to take the drugs himself.)

The controversy surrounding Kevorkian and assisted suicide are the most well-known examples regarding not only euthanasia but also an individual's right to die. Opinions and feelings vary on this sensitive topic. For those who believe a terminally ill individual does have the right to die, it is important to determine if that person is psychologically able to make that final decision.

Hypothesis: How do you assess the psychological competence of a terminally ill person who desires death? This guestion must be resolved in a case-by-case manner and according to the varied laws of each state. Medical doctors and psychologists must rely on the information

gathered from past and present cases of those who were granted permission by either physicians or the court system to terminate lifesupport systems.

Method: When a person is assessed for psychological competence, psychologists look for signs of depression, mental illness, and negative effects from any medication administered to them. If the terminally ill person does not show positive signs of these, the case is

> turned over to a physician, lawyer, court system, or any combination of these. From there, it is the legal decision of these authorities to allow the ill individual to follow through with the decision. This is the procedure used in adult cases. However. when the situation involves a child or teenager, the process is much more complex and emotionally difficult.



Unfortunately experts cannot determine if a person who has opted to end life has made a psychologically sound decision. For this reason, among others, many people oppose the idea that a person can terminate his or her own life. Those who support euthanasia believe that it releases ill individuals from the pain and anguish their disease or condition has caused. They argue that it is unfair for others to grant or deny the choice of death because they have not experienced the pain and anguish of a terminally ill condition themselves.

Analyzing the Case Study

- 1. What is euthanasia? Why is it controversial?
- 2. Why was Dr. Kevorkian convicted of murder?
- 3. Critical Thinking How might you use Kübler-Ross's stages of dying to help you determine whether a person is psychologically able to terminate his or her life?





Summary and Vocabulary

Much of people's fear of aging is rooted in stereotypes of what it means to grow older. The positive side of aging adult life is one of the best-kept secrets in our society.

Section 1

Adulthood

Main Idea: Adulthood is a time of transitionit involves shifting priorities and outlooks on life from adolescence and throughout the remainder of life.

- For most adults, the process of physical decline is slow and gradual.
- The adult years are a time when lifestyle may set the stage for problems that will show up then or in later life.
- Good physical and mental health seem to be the key factors affecting sexual activity in adulthood.
- The ability to comprehend new material and to think flexibly improves in early adulthood, and overall intelligence improves with age.
- An individual's basic character remains relatively stable throughout life.

Chapter Vocabulary

menopause (p. 131) generativity (p. 135) stagnation (p. 135) decremental model of aging (p. 138) ageism (p. 138) senile dementia (p. 142) Alzheimer's disease (p. 143) thanatology (p. 144) hospice (p. 147)

Section 2 Old Age

Main Idea: As we age, our priorities and expectations change to match realities, and we experience losses as well as gains.

- The misbelief that progressive physical and mental decline is inevitable with age has resulted in a climate of prejudice against the old.
- The health of older people, for the most part, is related to their health when younger.
- In late adulthood, life transitions are often negative and reduce responsibilities and increase isolation.
- The frequency and regularity of sexual activities during earlier years is the best overall predictor of such activities in later years.
- Crystallized intelligence, or the ability to use accumulated knowledge and learning in appropriate situations, increases with age; fluid intelligence, or the ability to solve abstract relational problems and to generate new hypotheses, decreases with age.

Section 3 Dying and Death

Main Idea: Death is inevitable. Most people face death by going through stages or an adjustment process.

- Elisabeth Kübler-Ross identified five stages of psychological adjustment to death: denial, anger, bargaining, depression, and acceptance.
- A hospice is a special place where terminally ill people go to die; it is designed to make the patient's surroundings pleasant and comfortable.



Assessment

CLICK HERE



Self-Check Quiz

Visit the *Understanding Psychology* Web site at psychology.glencoe.com and click on **Chapter 5— Self-Check Quizzes** to prepare for the Chapter Test.

Reviewing Vocabulary

Choose the letter of the correct term or concept below to complete the sentence.

- a. climacteric
- **b.** menopause
- **C.** generativity
- d at a set a
- **d.** stagnation
- e. decremental model of aging
- f. ageism
- g. senile dementia
- h. Alzheimer's disease
- thanatology
- hospice

1.	During, a woman's production of sex hormones drops sharply.
2.	The study of dying and death is
3.	Prejudice against the old is referred to as
	·
4.	An adult who chooses to hang on to the past is
	experiencing
5.	is a neurological disease marked by
	a gradual deterioration of cognitive functioning.
6.	A(n) is a special place where terminally ill people go to die.
7.	Between the ages of 45 and 50, every woman experiences a stage called the,
	experiences a stage called the

8. The desire to use one's wisdom to guide future generations is called _______.9. According to a(n) _______, progressive physical and mental decline is inevitable

which represents all of the psychological and

biological changes occurring at that time.

with age.

10. ______ is characterized by memory loss, forgetfulness, disorientation of time and place, a decline in the ability to think, impaired attention, altered personality, and difficulties in relating to others.

Recalling Facts

1. Using a graphic organizer similar to the one below, identify three midlife issues faced by adult women.



- **2.** Describe how the "decremental model of aging" leads to ageism.
- **3.** What is crystallized intelligence? What is fluid intelligence? Which type of intelligence increases with age?
- **4.** List Kübler-Ross's five stages of psychological adjustment to death. What behaviors would you expect of someone at each stage?
- **5.** What is a hospice designed to do? What types of people might live in a hospice?

Critical Thinking

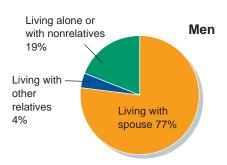
- **1. Making Inferences** Why do you think some men experience the age-thirty crisis? Do you think that some women might experience the age-thirty crisis? Explain.
- **2. Analyzing Information** Do you think an individual's personality basically remains the same throughout the individual's life, or is it capable of change during adulthood? Explain your answer.
- **3. Drawing Conclusions** Do you think that people of other cultures necessarily experience a "midlife crisis"? Why do you think so?
- **4. Synthesizing Information** Dying and death have only recently become topics that are discussed openly. Given this growing openness, what changes do you see being made to make the adjustment to the prospect of dying less severe? What other changes do you think still need to be made?
- **5. Demonstrating Reasoned Judgment** Some people believe that dying people should not be told they are dying. Do you agree? Why or why not?

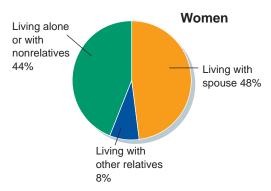


Building Skills

Interpreting Graphs Review the graphs, then answer the questions that follow.

Living Arrangements of Americans 65 and Older, 1997





Source: U.S. Bureau of the Census, 1997.

- 1. With whom do most Americans 65 and older live?
- **2.** Do more men or women of this age group live with a spouse? How can you explain this difference?
- **3.** How might living arrangements impact a person's adjustment to old age?



Practice and assess key social studies skills with Glencoe Skillbuilder Interactive Workbook CD-ROM, Level 2.



See the Skills Handbook, page 628, for an explanation of interpreting graphs.

Psychology Projects

- **1. Adulthood** Interview an adult who is more than 50 years old. Ask this person to describe himself or herself physically, socially, intellectually, and emotionally at the ages of 20, 30, 40, and 50. Before the interview, list specific questions that would provide this information. Ask which age was his or her favorite and why.
- **2. Old Age** Explore the way that elderly adults are depicted in art and in the media. Bring in examples of art, literature, and newspaper or magazine articles that depict or describe the elderly. Present your findings to the class and explain whether they depict the elderly fairly.
- **3. Dying and Death** Rituals surrounding death vary around the world. Research customs and rituals surrounding death in other countries or cultures. Present your findings in a pictorial essay.
- **4. Aging and Society** With plastic surgery and cosmetics, many of the visible signs of aging can be camouflaged. Should men with gray hair dye their hair? Should women get face-lifts? Discuss the double-standard for aging men and women and its implications about the underlying values of society in a brief essay.

Technology Activity

Locate Web sites on the Internet that address issues of middle adult-

hood and late adulthood. (The Web site for the AARP is one such site.) Find out what kinds of information these sites offer. Evaluate the sites in terms of how they might benefit the lives of adults in middle and old age.

Psychology Journal

Reread the entry in your journal that you wrote about the saying "You can't teach an old dog new tricks." Think about this statement in light of adult development and learning. What evidence is there that this statement is incorrect? Using what you have learned, write an entry in your journal that presents evidence supporting both sides of the issue.

