

**Life-Span Development
Thirteenth Edition**

Chapter 15: Physical and Cognitive Development
in Middle Adulthood

The Nature of Middle Adulthood

- Changing Midlife
 - Age Identity – as adults become older, their age identity is younger than their chronological age
 - An increasing percentage of the population is made up of middle-aged and older adults
 - “Rectangularization” of the age distribution

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The Nature of Middle Adulthood

- Defining Middle Adulthood
 - Middle Adulthood: 40–45 years of age to about 60–65 years of age
 - Declining physical skills and increasing responsibility
 - Awareness of the young-old polarity
 - Transmitting something meaningful to the next generation
 - Reaching and maintaining career satisfaction

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The Nature of Middle Adulthood

- Defining Middle Adulthood
 - Middle adulthood is the age period in which gains (growth) and losses (decline) balance each other
 - Late Midlife (55 to 65) is likely to be characterized by:
 - Death of a parent
 - Last child leaving the parental home
 - Becoming a grandparent
 - Preparation for and actual retirement

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Physical Development

- Physical Changes:
 - Visible Signs
 - Wrinkling and sagging of skin
 - Appearance of aging spots
 - Hair becomes thinner and grayer
 - Nails become thicker and more brittle
 - Yellowing of teeth

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Physical Development

- Physical Changes:
 - Height and Weight
 - Individuals lose height and gain weight
 - Both obesity and severe weight loss can pose health risks

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Physical Development

- Physical Changes
 - Strength, Joints, and Bones
 - Sarcopenia: age-related loss of muscle mass and strength
 - Cushions for bone movement become less efficient, often leading to joint stiffness and more difficulty in movement
 - Progressive bone loss

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Physical Development

- Physical Changes
 - Vision and Hearing
 - Accommodation of the eye (ability to focus and maintain an image) experiences sharp declines between 40–59 years
 - Difficulty viewing close objects
 - Reduced blood supply decreases visual field
 - Hearing can start to decline by the age of 40
 - High-pitched sounds are typically lost first

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Physical Development

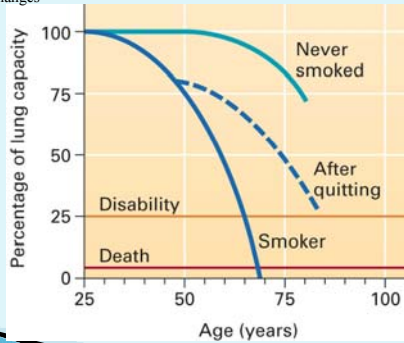
- Physical Changes
 - Cardiovascular System
 - High blood pressure, high cholesterol, and cardiovascular disease
 - Metabolic Syndrome: a condition characterized by hypertension, obesity, and insulin resistance
 - Exercise, weight control, and a diet rich in fruits, vegetables, and whole grains can often help

Physical Development

- Physical Changes
 - Lungs
 - Lung tissue becomes less elastic at about age 55, decreasing the lung's capacity
 - Sleep
 - Wakeful periods become more frequent in the 40's
 - Less deep sleep (stage 4)

Physical Development

Physical Changes



Physical Development

- Health and Disease
 - Chronic Disorders: a slow onset and a long duration
 - Rare in early adulthood but increase in middle age
- Stress and Disease
 - The Immune System and Stress
 - Stress and the Cardiovascular System
 - Culture and Health

Physical Development

- Mortality Rates
 - Chronic diseases are the main cause of death during middle adulthood
 - Heart disease
 - Cancer
 - In 2005, cancer was the leading cause of death in 45–64-year-olds followed by cardiovascular disease

Physical Development

- Sexuality
 - Climacteric: the midlife transition in which fertility declines
 - Menopause: time in middle age (late 40s to early 50s) when a woman's menstrual periods completely cease
 - Perimenopause: transitional period; often takes up to 10 years
 - Heredity and experience influence the onset of menopause

Physical Development

- Sexuality
 - Menopause
 - Hot flashes, nausea, fatigue, and rapid heartbeat
 - Not the negative experience it once was
 - Hormone Replacement Therapy (HRT) is controversial; long term use should be seriously reevaluated

Physical Development

- Sexuality
 - Hormonal Changes in Middle-Aged Men
 - Modest decline in sexual hormone level and activity
 - Erectile Dysfunction: inability to achieve and maintain an erection
 - May stem from physiological problems
 - Sexual Attitudes and Behavior
 - Sexual activity occurs less frequently than in early adulthood
 - Middle-aged men are more interested in sex than middle-aged women
 - Living with a spouse or partner makes all the difference in terms of engaging in sexual activity

Physical Development

Sexuality

Age groups	Percentage engaging in sex				
	Not at all	A few times per year	A few times per month	2-3 times a week	4 or more times a week
Men					
18-24	15	21	24	28	12
25-29	7	15	31	36	11
30-39	8	15	37	23	6
40-49	9	18	40	27	6
50-59	11	22	43	20	3
Women					
18-24	11	16	2	9	12
25-29	5	10	38	37	10
30-39	9	16	6	33	6
40-49	15	16	44	20	5
50-59	30	22	35	12	2



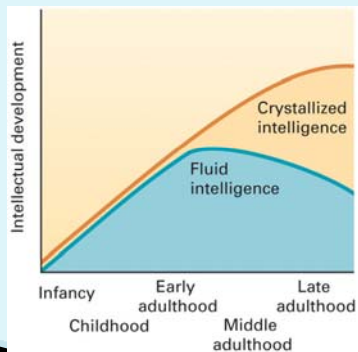
Cognitive Development

Intelligence

- Crystallized Intelligence: an individual's accumulated information and verbal skills
 - Continues to increase in middle adulthood
- Fluid Intelligence: the ability to reason abstractly
 - May begin to decline in middle adulthood

Cognitive Development

Intelligence



Cognitive Development

Intelligence

- The Seattle Longitudinal Study: study of intellectual abilities in adulthood years (Schaie)
- Peak performance on vocabulary, verbal ability, inductive reasoning, and spatial orientation was attained in middle age
- Decline in numerical ability and perceptual speed

Cognitive Development

Intelligence

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Cognitive Development

- Information Processing
 - Speed of Information Processing
 - Perceptual speed begins declining in early adulthood and continues to decline in middle adulthood
- Expertise
 - Expertise often shows up more in middle adulthood than in early adulthood
 - Rely on accumulated experience
 - Process information automatically and analyze it more efficiently
 - Have better strategies and shortcuts to solving problems
 - Are more creative and flexible in solving problems

Cognitive Development

- Information Processing
 - Memory
 - Verbal memory declines during middle adulthood according to most researchers
 - Linked to changes in working memory and ineffective memory strategies
- Practical Problem Solving
 - Remains stable in early and middle adulthood, then declines in late adulthood

Careers, Work, and Leisure

- Work in Midlife
 - The role of work is central during middle age
 - In the U.S., about 80% of people aged 40-59 years of age are employed
 - A time of evaluation, assessment, and reflection about work

Careers, Work, and Leisure

- Work in Midlife
- Current Challenges and Changes
 - Currently, middle-aged workers face several challenges in the 21st century
 - Globalization and exporting of jobs
 - Rapid developments in information technologies
 - Downsizing organizations
 - Early retirement
 - Pensions and health care

Careers, Work, and Leisure

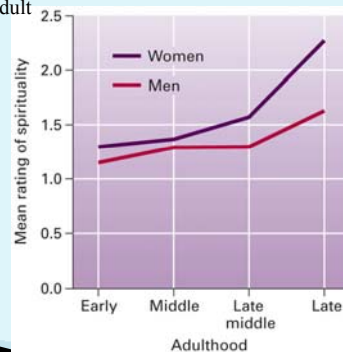
- Leisure
 - Pleasant times after work when individuals are free to pursue activities and interests of their own choosing
 - Compared with those who never took vacations, men who went on annual vacations were 21% less likely to die over the 9 years studied, and 32% less likely to die of coronary disease

Religion and Meaning in Life

- Religion and Adult Lives
 - More than 70% of middle-aged adults are religious and consider spirituality a major part of their lives
 - Increase in spirituality tends to occur between late middle adulthood and late adulthood
 - Women have consistently shown a stronger interest in religion than males

Religion and Meaning in Life

Religion and Adult Lives



Religion and Meaning in Life

- Religion and Health
 - Religion is positively linked to health
 - Frankl (1984) identified the three most distinct human qualities as:
 - Spirituality
 - Freedom
 - Responsibility

Religion and Meaning in Life

- Meaning in Life
 - Baumeister and Vohs (2002) argue that the quest for the meaning of life may be understood in terms of four main needs:
 - Need for purpose
 - Need for values
 - Need for a sense of efficacy
 - Need for self-worth