



3

Integrating Physical, Psychological, and Social Change across the Life Course

Chapter Overview

In this unit, you will learn about the non-social, individual aspects of aging that occur in our sensory, physiological, and psychological systems. You will become familiar with some of the normal changes that occur across the life course and how they can influence social behaviour, social interactions, and social networks of people in later life. You will also be introduced to concepts relating to the sexual behaviour of older adults, ways in which adults compensate for age-related changes, how personality can change across the life course, and disability and disease in later life.

Frailty and disability are not inevitable consequences of aging; in fact, there are behaviours and attitudes that can actually slow the processes of aging, help people maintain their independence, and contribute to their quality of life as they age. The differences within and between individuals is due to genetic, social, and environmental factors, including socio-economic status, gender, diet, race, ethnicity, occupation, geographic location, body type, and age cohort.

Learning Objectives

By the end of this chapter, you will be able to do the following:

- Understand and distinguish the individual aspects of aging that occur in our multi-level genetic, sensory, physiological, and psychological systems, and their interrelations with social aspects of aging.
- Learn that physiological aging is not a disease, but rather, represents a complex set of processes.
- Identify and discuss which physical and cognitive changes across the life course have negative and/or positive influences on the social behaviour, social interaction, and social networks of aging individuals.
- Answer the question of whether the motor, sensory, and cognitive systems decline to the same degree and at the same rate?
- Gain a more complete understanding of older adults' sexuality and sexual activity in later life.
- Provide detailed descriptions and research support for the benefits and barriers of physical activity faced by older adults, and whether and to what extent they can delay, or compensate for, natural physiological and cognitive losses with age by engaging in physical activity in middle and later life.
- Know the controversies surrounding whether personality traits remain stable or change throughout a person's life.
- Understand the effects of rising rates and absolute numbers of dementia on Canada's health-care and community-care systems and those who care for them.
- Define and know the relevance of vitality as it relates to aging well.

Key Facts

- More than 40 per cent of Canadians 65 and over report having at least one disability that influences, to some extent, their ability to perform activities required in daily life.
- Only about 8 per cent of Canadians aged 65 to 74 experience any kind of diagnosed dementia, but this percentage increases to about 32 per cent for those aged 85 and over.
- It is estimated that the number of new cases (incidence) of dementia in Canada will rise from approximately 115,000 per year in 2015 to 257,800 in 2038.

Key Terms

cautiousness A generalized tendency to respond slowly or not at all to a stimulus or task, perhaps out of fear of making a mistake or in order to complete the task as successfully as possible. (p. 81)

cognitive vitality The cognitive traits that are more common among those who reach extreme ages. (p. 96)

competence Adaptive behaviour that is demonstrated to varying degrees in a specific situation. (p. 88)

creativity The quantitative and qualitative productivity of an individual that is evaluated by others. (p. 92)

crystallized intelligence Based on education, experience, and acculturation, this type of intelligence involves vocabulary, verbal comprehension, and a numerical ability to solve problems. (p. 88)

disability A physical or mental condition or a health problem that restricts an individual, partially or totally, in the ability to perform a physical, social, or cognitive activity in the manner or within the range considered normal for a human being. (p. 71)

field-dependent Individuals who are more aware of their social environment, more people-oriented, and generally more conventional in their behaviour. (p. 91)

field-independent Individuals who are more analytical, more internally directed, and less constrained in their behaviour by tradition and convention. (p. 92)

fluid intelligence Based on the functioning of the nervous system, this type of intelligence involves incidental learning that is necessary for reasoning and problem-solving. (p. 88)

frailty A disease state that is most common late in life, characterized by muscular weakness, fatigue and low energy, weight loss, slow or unsteady gait, and decreased physical and social activity. (p. 71)

generativity A process in mid-life to late life wherein individuals become less concerned with the self and more concerned and involved with mentoring others and with contributing to various groups, organizations, or communities. (p. 95)

global sensory impairment Aging-related decline affecting all five of the sensory systems. (p. 85)

impairment The loss of some physical or mental function. (p. 82)

intelligence A multi-level concept involving the ability to think logically, to conceptualize, and to reason. (p. 88)

multimorbidity The co-occurrence of more than one chronic illness or morbidity condition. (p. 70)

personality traits A distinguishing characteristic or quality of the human personality (e.g., passive, aggressive, extroverted, egocentric, emotional). (p. 94)

physical literacy The motivation, confidence, physical competence, understanding, and knowledge that individuals develop in order to maintain physical activity at an appropriate level throughout their life. (p. 78)

presbycusis A progressive inability to hear higher-frequency sounds in music and speech. (p. 84)

presbyopia A progressive loss of flexibility in the lens of the eye that decreases the ability to focus on objects at varying distances. (p. 83)

reaction time The period of time from the perception of a stimulus (such as a red light) and the initiation of an appropriate reaction (such as moving the foot from the accelerator to the brake). (p. 82)

self-concept A subset of personality relating to how we perceive and represent ourselves. (p. 95)

wisdom An accumulated ability based on experience that enables an individual to adapt to changing situations and to make appropriate decisions. (p. 93)

Study Questions

See below for answers.

1. What are the benefits and patterns of physical activity in later life? How can we account for the varying degrees of involvement by older adults?
2. What are the similarities and differences between the different learning styles and how older adults used them?

Additional Resources

Articles

- Heisel, M.J., E. Neufeld, and G.L. Flett. 2015. [Reasons for living, meaning in life, and suicide ideation: Investigating the roles of key positive psychological factors in reducing suicide risk in community-residing older adults.](#) *Aging & Mental Health, Special Issue on Suicide and Aging.*
- Parminder Raina, Christina Wolfson, Susan Kirkland, Lauren Griffith (Editors). 2018. *Canadian Longitudinal Study on Aging Report on Health and Aging in Canada: Findings from Baseline Data Collection 2010–2015*, www.clsa-elcv.ca/CLSAReport
- Franke, T., Tong, C., Ashe, M.C., McKay, H., & Sims-Gould, J. (2013). The Secrets of Highly Active Older Adults. *Journal of Aging Studies*, 27, 398–409. [Summary.](#)
- Uppal, Sharanjit and Athanase Barayandema. 2018. [Life Satisfaction among Canadian Seniors.](#) Insights on Canadian society. Statistics Canada.

Videos

[Anatomy](#) by Patrick Bossé, 2013 (8 minutes) National Film Board of Canada

Excerpt from the website: A white room. The aging bodies of two actors testify to a love that has triumphed over time and engage in a captivating dialogue of desire, defying inertia, old age and death. This short film is a starkly pure evocation of the senses.

[There Is No Typical Older Person](#) by Parminder Raina. 2017. (8:53 minutes). The Walrus Talks Mobility.

[Aging: It's Not What You Think](#) by Thad Polk. 2016. TEDxUofMichigan.

Websites

[Age Better](#), ParticipACTION

[Canada's Physical Activity Guidelines for Adults 65+](#)

Alzheimer Society of Canada, <http://alzheimer.ca>

Study Questions—Answers

1. The benefits of regular physical activity can include:
 - improved cognitive function
 - slowing of cellular degeneration
 - increased blood flow through the capillaries
 - increased muscle mass, endurance, and strength
 - decreased body fat and a lower body weight
 - increased flexibility and coordination
 - increased cardiovascular endurance
 - decreased systemic blood pressure
 - increased and more efficient blood flow from the extremities to the heart
 - increased maximal oxygen intake and physical work capacity
 - lowered resting and exercising heart rate
 - more rapid heart rate recovery after strenuous exercise
 - more rapid oxygen-debt repayment after strenuous exercise
 - increased use of anaerobic energy reserves
 - increased neural regulatory control, including faster reaction time
 - increased bone density (pp. 76–81).
2. Two contrasting cognitive styles have been labelled field-dependent and field-independent. “Field-dependent” individuals are more aware of their social environment, more people-oriented, and generally more conventional in their behaviour. In contrast, “field-independent” people are more analytical, more internally directed, and less constrained in their behaviour by tradition and convention. Cognitive style is revealed, as well, when a decision involves some risk, such as driving (pp. 91–92).