



Aging

Instructor Manual

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This module, *Aging*, covers not only old-age, but how we age throughout life. The module gives an overview of life span and life course theories to study aging. Some additional topics include how cognitive aging is measured through memory and recall tasks, the changes in personality that can occur over a lifetime, and social changes as a result of aging.

Learning Objectives

- **Relevant APA Learning Objectives (2.0)**
 - Describe key concepts, principles, and overarching themes in psychology (1.1)
 - Develop a working knowledge of psychology's content domains (1.2)
 - Describe applications of psychology (1.3)
 - Use scientific reasoning to interpret psychological phenomena (2.1)
 - Engage in innovative and integrative thinking and problem solving (2.3)
 - Interpret, design, and conduct basic psychological research (2.4)
 - Incorporate sociocultural factors in scientific inquiry (2.5)

- **Content Specific Learning Objectives: Aging**
 - Describe cognitive, psychosocial, and physical changes that occur with age.

- Explain research approaches to studying aging.
- Provide examples of how age-related changes in these domains are observed in the context of everyday life.

Abstract

Traditionally, research on aging described only the lives of people over age 65 and the very old. Contemporary theories and research recognizes that biogenetic and psychological processes of aging are complex and lifelong. Functioning in each period of life is influenced by what happened earlier and, in turn, affects subsequent change. We all age in specific social and historical contexts. Together, these multiple influences on aging make it difficult to define when middle-age or old age begins. This chapter describes central concepts and research about adult development and aging. We consider contemporary questions about cognitive aging and changes in personality, self-related beliefs, social relationships, and subjective well-being. These four aspects of psychosocial aging are related to health and longevity.

Class Design Recommendations

Aging is optimally taught over one long class period and can be largely activity driven. The lecture will tie in to the activity discussion so you can organize the discussion to mirror the lecture slides and refer to the activity throughout the class. You also have the option to do a shorter activity time and then follow with a traditional lecture rather than weaving the two together. Please also refer to the Noba Powerpoint slides that compliment this outline.

1st class period (75 min):

- Activity/Discussion on perspectives
- Cognitive Aging
- Personality and Self
- Social Relationships
- Emotion and Well being
- Successful Aging and Longevity\

Alternative for shorter class periods

1st class period (50 - 75 min):

- Activity/Discussion on perspectives (30 – 45 minutes)

2nd class period (50 – 75 min):

- Cognitive Aging
- Personality and Self
- Social Relationships
- Emotion and Well being
- Successful Aging and Longevity

Module Outline

Life Span and Life Course Perspectives on Aging

- With a growing aging population and increased life expectancy people need to reconsider their personal life plans in preparing for a long life, especially in regards to family and career.
- As in all age populations there is significant heterogeneity among older adults in all areas of life (cognitive functioning, relationships, personality, lifestyle, beliefs). These differences reflect biological and psychological aspects of aging.
- Theories of aging describe how multiple factors interact and change over time.
- Life-course theories highlights the effects of social expectations and normative timing of life events (e.g., becoming a parent, retirement). They also account for effects of cohort (generations) and socio-cultural subgroups (e.g., race).
- Life span theories focus on processes within the individual over the life span.
- Life course and life span theories both rely on longitudinal research methods.

Cognitive Aging

- The psychometric approach to cognitive aging involves standardized tests to measure fluid (information processing ability) and crystallized (experience and knowledge) intelligence.
- With age significant declines are observed in performance on cognitive tasks. Older adults tend to have more trouble with memory recall tasks and several declines are observed that may explain age difference in these cognitive tasks:
 - This may be because working memory becomes less efficient.
 - Processing speed slows down.
 - Some researchers argue that inhibitory functioning declines with age.
 - Hearing and vision also decline.
- Fewer age differences are observed in recognition memory tasks, where memory cues are available or when acquired knowledge or experience can be drawn from. Some examples of tasks where older adults perform better or have learned to compensate:
 - Word knowledge or vocabulary tests.
 - Older typists are able to look further ahead in the text.
 - Older chess experts can focus on smaller sets of possible moves.
 - Accrued knowledge can lead to better decision-making.

Personality and Self-related processes

- Recent research has shown that while some people's personalities remain stable over time, other's personalities do not.
- Average changes of the "Big Five" traits show neuroticism and openness decrease and conscientiousness increase with many individual differences in this pattern.
- Autobiographical narratives enhance self-esteem and guide behavior. As we age, our personal narratives change. Theory suggests that themes that were relatively unimportant in earlier years, gain salience as we age. Reorganizing personal narratives and self-descriptions are the major tasks of midlife.
- Subjective age is of particular interest to those who study life span and life course. The subjective age is a construct that indicates the age a person feels and what age group they categorize themselves into. After early adulthood most people say they feel younger than their age and the gap increases with age.

- Age identity is a different construct that asks people how satisfied they are with their aging. Different aspects of age hold different values and may be seen as positive or negative.
- Feeling younger and having a positive age identity are signs of positive self-perceptions of aging.

Social Relationships

- Relationships are the primary source of support and comfort as people age together. The social network is unique to each individual. Social connections are held together through exchanges in social support that come in tangible and emotional forms. How often, what type, and the reciprocity of these exchanges impact the health of the relationship.
- The Socioemotional Selectivity Theory proposes that with increased age our motivational goals tend to be emotion regulation. Older adults actively restrict their social circle to prioritize close relationships.
- Older married couples tend to show more affection during conflict than younger couples. Older married couples who report positive spousal support also report better health than unmarried peers.
- Marriage relationships can be stressed if one partner is the primary caregiver. The positive and negative aspects in these cases are complex and can be perceived differently in different contexts.

Emotion and Well-being

- As we get older the likelihood of losing loved ones increases and it is important to understand how well-being is affected by these changes. The patterns of differences in well-being depends on how it is being measured.
- Global subjective well-being assesses overall perceptions of life and can include questions about life satisfaction or judgments about if other's are living the best life possible.
- The variables that predict well-being change as we age. And different life events (marriage, divorce, widowhood) affect well-being in different ways and individuals do not often adapt back to the previous level of well-being.
- Research suggests that global well-being is highest in early and late adulthood and lowest in midlife.
- Hedonic well-being is the emotional component of well-being including measures of positive and negative affect. Negative affect tends to decrease with age.

- The pattern shows highest well-being in early and late adult hood.
- Psychological well-being evaluates the positive aspects of psychosocial development. Older adults report being better able to manage everyday life, more independence, and lower personal growth and purpose in life.

Successful Aging and Longevity

- Increased life expectancy in the 20th century suggests that genes are only a small part of the variance in human life-span. Research is examining what environmental and behavioral factors contribute to healthy aging.
- Three criteria for successful aging have been defined as avoidance of disease, maintenance of physical and cognitive functioning, and active engagement in social activities.

Difficult Terms

hedonic well-being

heterogeneity

inhibitory functioning

Lecture Frameworks

Overview

- Introductory activity:
 - Start class by investigating attitudes about older adults. The ideal way to do this activity is to have students gather data before class and turn it in before class. Use the attitudes to begin a discussion for why people may hold these ideas and lead into the lecture/text to help students understand if any of these ideas have a real basis. For example: "Old people are forgetful"; talk about what we know about cognitive aging and memory. If you have the list as a digital file, you can show it at relevant points throughout the rest of the lecture to highlight stereotypes and attitudes that were mentioned. *See Activities/ Demonstrations for full instructions.*

- Lecture – Refer to slides for the following:
 - To build from the activity answers. Ask students what they would need to be happy at age 80? Give an overview of the aging population and talk about why it is important for young adults to also think about these issues.
 - To introduce the different ways of looking at development (life course vs. life span theories)
 - To talk about cognitive changes during aging and the real world effects of these changes. What happens to work productivity? Quality of life?
 - To talk about social aging:
 - Personality and Self: Does personality remain stable over time? Are people happy with themselves as they age?
 - Social Relationships: What do relationships look like as people age? Small number of close relationships and reciprocity are two elements seen in relationships of older adults.
 - Emotion and wellbeing: Are older adults happy? How do we determine wellbeing?
 - To talk about successful aging and longevity: What can people do to extend life and health? What elements are generally in our control (diet, exercise) and out of our control (genes)?

Discussion/Conclusion

- Ask students if their perceptions of older adults have changed. To go back to the activity at the start of class ask them what the first three words that come to mind when they hear “old person” Did they write down positive attributes?

Activities & Demonstrations

Investigating attitudes toward older adults

This is an easy activity in that it does not require additional resources, only a bit of planning. Ideally you would have students gather data before class and turn it in with enough time for you to format it.

Have students ask four other people the first three terms or words that come to mind when they hear “old people.”

Students then turn in the terms and you prepare a master list showing the frequency of each term. A Google form with three boxes and a place to record gender and age of the person answering is one fast way to get data from your whole class into a spreadsheet form. You could also have them turn in via your school’s Course Management System (e.g., Blackboard, Moodle) or simply email you the results.

If you do not have students collect data beforehand there are a couple of things you could do in class. If you have a smallish class, simply ask the class to write down the first three words that come to mind and collect them. Then have a student volunteer or two help to write the terms on the board and make tally marks for repeats to count frequency. In a large class have them break into groups with one person to record or have “data gatherers” who ask four classmates.

Whichever method you use for data gathering the next part is the most important. Ask students about each term and what kind of connotation it has. Is it positive (P), negative (N), or neutral (O)? Mark each term. Look at the frequency of the most used terms and also the distribution of P, N, & O.

According to Panek (1984), a class of undergraduates listed 60% of responses as negative. The discussion can be framed a variety of ways.

- Where do these stereotypes come from? (media, people you know)
- How well trained are doctors in psychology and physical issues of aging
- How do negative stereotypes affect old people? (Unable to get a job, doctors / lawyers not taking them seriously).
- How can young adults be more aware of the social barriers that affect young adults?
- There is some physical and cognitive decline that happens with age – but an individual should not be judged based on the population (there will be different levels of decline and some older adults will show much less than others).
- What types of decline (seen in the list) are typical and which are based on bias toward older

people?

Panek, P. E., (2008). Investigating attitudes toward older adults. In L. T. Benjamin, Jr. (Eds.), *Favorite activities for the teaching of psychology (188-190)*. Washington D.C.: American Psychological Association.

Developmental Differences in the quality of life

This activity is easy to do as a class discussion and drawing a graph on the board.

Before the activity draw a graph axis on the board with each decade marked on the X axis and satisfaction on the Y axis (very poor, poor, neutral, good, very good).

Identify some life events on the X-axis for reference (college, marriage, job, retirement)

Possibly have a couple of colors of chalk or markers to note disputes among students, some say a particular decade is good and others say poor. You could also use different colors to graph different domains (red for social, green for cognitive, blue for financial, etc...).

Ask students when they think the prime of life is? Take and record some responses and ask students why they chose that time – some responses could be successful job, family, retirement, college is great, etc...

Bring up the idea that there may be peaks and valleys that occur at different ages for different domains. Brainstorm some domains (health, financial, cognitive, work and career, leisure and recreation, family life, education / learning) and then go through each decade by decade.

You can do this as a full class or have students do this individually or in small groups. If in groups, come back together as a full class after a few minutes and create a class graph. For each domain ask for the highest and lowest points. There may be disagreement among students / groups as to where a domain should be graphed, talk these out and let students hear both sides of an argument. There may be more than one peak or valley for a domain (leisure is high in 20s when no responsibility and 60s retirement, but low in 40s when working hard to raise a family).

You can use the discussion to lead into a lecture or to tie back to the lecture about what research has shown about aging.

Hershey, D. A., & Jacobs-Lawson, J. M. (2001). Developmental differences in the quality of life: A classroom teaching exercise. *Teaching of Psychology*, 28, 114–117.

Graph peaks and valleys of different domains over the life-span. College graduation, jobs, marriage, kids, retirement

Additional Activities

Fingerman, K. L. & Bertrand, R. (1999). Approaches to teaching adult development within a life span development course. *Teaching of Psychology* 26 (55) 1 pp 55-56. doi: 10.1207/s15328023top2601_17

- Gather pictures of people of all ages. Print them from a computer, or often flea markets will have boxes of old photos you could purchase. Organize students into small groups and give each group a small stack of photos (5-10). Ask the group to tell you about the person in the photo – what can they tell from a picture. (healthy, wealthy, smart, successful, etc...) Then ask students to look at the positive and negative attributes and the ages of the people in the photos. Is there an age bias?

Video - Nova ScienceNOW: Can We Live Forever?, Broadcast January 26, 2011 on PBS; Watch online at <http://www.pbs.org/wgbh/nova/body/can-we-live-fore...>

- Description from PBS: This provocative episode of NOVA ScienceNOW examines whether we can slow down the aging process, looks at the latest on human hibernation, and checks in with bioengineers and a computer scientist inventing ways to keep us "going forever." Neil deGrasse Tyson also takes a lighthearted look at whether the tricks that have kept a 1966 Volvo running for 2.7 million miles can also help the human body go the extra mile.
- 53 minutes.

Foroohar, R. (2014, June 30). The retirement apocalypse. *Time* 40-46.

This article is about the economic crisis of a huge number of Americans reaching retirement in the coming decades. This could be used as a starting point for a discussion about the social structures as a population ages and how we can start thinking about caring for and supporting an aging population, especially in light of the declines discussed in the elderly.

Abstract: Public pensions are underfunded. Fewer than half of all private-sector workers enroll in a formal savings plan. And social security may not exist in its current form when it's time for you to stop working. The real debt-and-deficit crisis facing our country isn't national – it's personal. A look at the coming retirement apocalypse and what we have to do to avoid it.

Outside Resources

Web: Columbia Aging Society

<http://www.agingsocietynetwork.org/>

Web: Columbia International Longevity Center

<http://www.mailman.columbia.edu/academic-departments/centers/columbia-aging/international-longevity-center-knowledge-transfer>

Web: National Institute on Aging

<http://www.nia.nih.gov/>

Web: Stanford Center Longevity

<http://longevity3.stanford.edu/>

PowerPoint Presentation

This module has an associated PowerPoint presentation. Download it at https://nobaproject.com//images/shared/supplement_editions/000/000/268/Aging.pptx?1416598346.

About Noba

The Diener Education Fund (DEF) is a non-profit organization founded with the mission of re-inventing higher education to serve the changing needs of students and professors. The initial focus of the DEF is on making information, especially of the type found in textbooks, widely available to people of all backgrounds. This mission is embodied in the Noba project.

Noba is an open and free online platform that provides high-quality, flexibly structured textbooks and educational materials. The goals of Noba are three-fold:

- To reduce financial burden on students by providing access to free educational content
- To provide instructors with a platform to customize educational content to better suit their curriculum
- To present material written by a collection of experts and authorities in the field

The Diener Education Fund is co-founded by Drs. Ed and Carol Diener. Ed is the Joseph Smiley Distinguished Professor of Psychology (Emeritus) at the University of Illinois. Carol Diener is the former director of the Mental Health Worker and the Juvenile Justice Programs at the University of Illinois. Both Ed and Carol are award-winning university teachers.

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