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Chapter 2: Theories of Aging: A Multidisciplinary Review for   
 Occupational and Physical Therapists

AGE IS STRICTLY A CASE OF MIND OVER MATTER. IF YOU DON’T MIND, IT DOESN’T MATTER

--JACK BENNY

 An overview of the purpose and key points in the chapter

Theoretical frameworks help us understand complicate phenomena, and to better predict what will happen next based on our understanding of how various factors interrelate. As the first chapter   
established, the experience of aging is based on a complex interplay of biology, environmental factors, and psychological factors. It is, therefore, unsurprising, that there are a large number of theories to   
explain various aspects of aging. This chapter presents a summary of these theories and the ways in   
which they affect occupation in later life.

There are several critical “take away” messages in this chapter:

 Biological theories of aging focus on describing cellular, systemic, and organismal change;

 Psychological theories of aging emphasize individual experiences and strategies for coping in   
 later life;

 Sociological theories of aging describe the interaction of the older population with the   
 population in general;

 Aspects of each of these clusters of theories contribute to understanding of occupational   
 engagement and meaning in later life.

 Classroom activities

1. Case studies

 “Successful ging”

--[http://www.aging.ucsd.edu/pdf/Healthwise/2-09.pdf](http://www.aging.ucsd.edu/pdf/healthwise/2-09.pdf/)

The Stein Institute at UCSD posts a number of good videos about various aspects of aging, and publishes a newsletter. Each month, the newsletter contains a profile of a successful older adult. As you discuss factors that contribute to successful aging, you may want to refer your students to these descriptions and have them analyze the factors in the individual’s background that contribute to quality of life in later life. You can also ask them to consider what factors might mitigate against successful   
aging, and what the individual has had to overcome.

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2. Debate

Asking students to compare and contrast the various theories can assist them in identifying   
the most salient points of each. A debate format is engaging and may be of more interest to students   
than straightforward class presentations. It also encourages students to read the literature that may   
support or refute various theories, emphasizing the importance of knowing and understanding research   
evidence.

3. Video presentations

 “ ging successfully: The psychological aspects of growing old” (Davidson Films)

--[http://www.youtube.com/watch?v=fr6EOLFVnVg](http://www.youtube.com/watch?v=fr6eolfvnvg/) (9.26 min.)

Discusses SOC theory. Presented by the theory originators, Baltes and Baltes. SOC theory has particular relevance to occupation, and can generate good discussion about how theories of aging from other disciplines can inform occupational theories. This can serve as a good lead-in to chapter 3.

 “Practical pplication of Gene Silencing Theory of ging “- Stanislav R. Burzynski MD, PhD

--[http://www.youtube.com/watch?v=0f1xO7Zd4xk(8.26](http://www.youtube.com/watch?v=0f1xo7zd4xk(8.26/) min.)

Genetic theories about the causes of aging. There is a bit of an “ad” about products to reduce aging, that can be used to create some controversy in class discussion. Students may come with beliefs about ways to prevent biological aging (ginseng? Vitamin E?) and some consideration of the probability that any of these would be effective can be interesting and instructive.

 Out-of class assignments

1. Scan the Media

 <http://www.nytimes.com/pages/science/index.html>

The Tuesday New York Times has a science/technology section. Many of the science findings   
relate to biological theories that explain aging. You can ask students to monitor the Times (or other   
news media) to find reports of relevant new research. Students can report back either verbally or in   
brief written reports. A helpful exercise is to ask students to report not only on what is in the article, but   
what’s missing͘ For example, many epidemiological studies reported in the popular press omit the   
denominator when reporting risk data for disease. In addition to helping students understand how the   
general population learns about aging, this is a good way to enhance information literacy.

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 <http://www.nytimes.com/pages/health/index.html>

There is also a health section. Some of the science findings relate to biological theories that explain aging.

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If students have done interviews of older adults as an exercise for chapter one, they might go back to the transcripts of those interviews to see which of the theories they believe fit what they were told by their interviewees. In addition to helping students find a link between theory and reality, this is a beginning exercise in theory-based content analysis.

Any of the additional readings listed below could serve as a basis for a research paper focused on exploring how the theory has evolved since its inception. This serves not only to help students better understand theories of aging, but also to learn how theories are developed and validated.

 Supplementary materials

1. Additional readings

It is quite worthwhile for students to read original sources for the theories described in this

chapter.

Suggestions from the bibliography include the following:

 Dowd, J. J. (1975). Aging as exchange: A preface to theory. <i>Journal of Gerontology,   
 30,</i> 584-594.

 Elder, G. H., Jr. (1992). Models of the life course. <i>Contemporary Sociology: A Journal of   
 Reviews, 21,</i> 632-635.

 George, L. K. (1996). Missing links: The case for a social psychology of the life course. <i>The   
 Gerontologist, 36,</i> 248-255.

 Harman, D. (1956). Aging: A theory based on free radical and radiation chemistry.   
 <i>Journal of

 Gerontology, 11,</i> 298-300.

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 Levinson, D. J. (1978). <i>The seasons of a man’s life.</i> New York: Knopf.

 Salthouse, T. A. (1991). <i>Theoretical perspectives on cognitive aging.</i> Hillsdale, NY:   
 Lawrence Erlbaum Associates.

 Walford, R. (1969). <i>The immunologic theory of aging.</i> Copenhagen: Munksgaard.

2. Videos

You may want to ask students to watch videos outside of class and/or locate videos to share with their classmates. Here are some good ones to start with:

 “Chromosome ends and diseases of aging”

--[http://www.youtube.com/watch?v=b70Hh6Hk4gc](http://www.youtube.com/watch?v=b70hh6hk4gc/) (58 min.)

Elizabeth Blackburn, Ph.D. , University of California, San Francisco Osher Center

 “Quality of life and aging”

--[http://www.youtube.com/watch?v=QFpfb8KcD-8](http://www.youtube.com/watch?v=qfpfb8kcd-8/) (58 min.)

Theodore Gianits, Ph.D. University of San Diego Stein Institute

3. Websites

 “Theories of ging Information Center”

--[http://websites.afar.org/site/PageServer?pagename=IA\_b\_the\_home](http://websites.afar.org/site/pageserver?pagename=ia_b_the_home/)

An excellent resource for explanations of various biological theories of aging, including links to other resources and updates on research. Students might report back to the class about what they find, or write brief summaries.

 “Unraveling the Secrets of Longevity”

--<http://longevity-science.org/>

The appearance of this website is a bit off-putting, as is the hype. But the creators of the site are well-known University of Chicago researchers who do a great deal of work in biological theories of longevity. There are quite a number of very interesting links.

 “Sociology of ging”

--[http://www.sociosite.net/topics/aging.php](http://www.sociosite.net/topics/aging.php/)

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Provides a rich array of links to sites and readings on the sociology of aging. A few focus on   
ageism, but many provide resources that can improve understanding of sociological theories as well as   
many that offer specific intervention strategies for dealing with family and other sociologically-based   
challenges of aging.

 Assessment strategies

1. Multiple choice questions (correct answer in bold)

1. Theories of aging attempt to describe all of the following EXCEPT:

A. the population of those categorized as elderly.

B. late life as the best developmental phase of the life span.

C. aging as a developmental process.

D. age as a dimension of structure and behavior.

2. Theories of aging must be modified because:

A. Changes in family structure and government expectations are altering the experience of   
aging.

B. Most existing theories of aging are inaccurate.

C. Current theories of aging ignore the fact that individuals move through an entire lifespan that includes childhood and younger adulthood.

D. It is now recognized that genetic factors adequately explain all phenomena associated with   
aging.

3. Developmental-genetic theories of aging emphasize:

A. cellular level changes that affect organismal changes.

B. genetic accidents or errors that occur over time leading to aging.

C. defects in protein synthesis mechanism leading to errors in proteins.

D. functional decrements in neurons, the immune system, and the potential damage done by excess calories.

4. The “free radical” theory of aging suggests that:

A. Older adults with conservative political views age more successfully than those who tend to be more liberal.

B. Cell damage from chemically reactive agents causes biological aging.

C. Cognitive change is the result of damage to the cortex.

D. Sociological theories are more powerful in explaining aging than biological theories.

5. Life span theory suggests that:

A. the life span of a human is fixed at 120 years meaning no one can be expected to live beyond   
that age.

B. personality dictates how long a given individual will live.

C. changes in cognition are directly associated with expected life span.

D. the second half of life is characterized by significant individual differentiation.

6. Selective Optimization with Compensation Theory focuses on older adults ability to:

A. optimize some functions and compensate for functional loss.

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B. select investments that will optimize return to allow the individual to pay others for   
services.

C. compensate for losses by withdrawing from social interaction and becoming more spiritual.

D. select emotions to express to avoid excessive stress in later life.

7. The main difference between psychological and sociological theories of aging is that:

A. sociological theories emphasize social interaction while psychological theories emphasize withdrawal.

B. sociological theories emphasize social trends while psychological theories focus on the   
individual.

C. psychological theories emphasize dysfunction while sociological theories emphasize successful aging.

D. psychological theories focus on family support while sociological theories focus on societal   
support.

8. Feminist theories of aging reflect:

A. differences in the aging experience for stay-at-home mothers as compared with career   
women.

B. the expectation that women will age more successfully because their expectations for later life are more modest than those of men.

C. differences in life experience, including aging, on the basis of societal views and expectations of women and men.

D. social views of older women that are more positive than those for men.

9. In the future, greater emphasis will be placed on macro-economic theories of aging because:

A. there is increased recognition that economic and institutional structures have an impact on   
aging.

B. individuals with substantial financial resources will have no challenges in later life.

C. older adults make the most significant contributions to national economies around the world.

D. no link has ever been established between socioeconomic circumstances and aging.

10. The difference between theories IN aging are becoming more accepted than theories OF aging because the former:

A. focus on specific ethic groups as the U.S. becomes more diverse.

B. emphasize place of residence as the most salient factor in successful aging.

C. promote interdisciplinary exploration of the phenomenon/process of growing old.

D. evidence to date suggests that understanding later life should look at that phase of life as entirely separate from what came before it.

2. Essay questions

1. What is the focus of the various biological theories of aging?

2. Compare and contrast life span theory with the theory of selective optimization with compensation.

3. Define social gerontology and give examples of some of the theories developed within this   
discipline.