Psychology 365
Lecture Notes

Themes and Issues

KEY LECTURE POINTS:
- The biopsychosocial perspective
- Four main principles of adult development and aging
- The meaning of age
- Influences on development
- Social factors in adult development and aging

THE BIOPSYCHOSOCIAL PERSPECTIVE

- Biological
- Psychological
- Sociocultural
FOUR MAIN PRINCIPLES OF ADULT DEVELOPMENT AND AGING

| Principle                                                      | Meaning                                           |
|                                                               |                                                  |
| Changes are continuous over the lifespan                       |                                                  |
| Individual differences must be recognized                      |                                                  |
| It is the survivors who grow old                               |                                                  |
| Normal aging is different from disease                         |                                                  |

*Changes are continuous*

Class results for the Survey “When I’m 64”

1. Height
2. Weight
3. Hair
4. Wrinkles
5. Retirement
6. Marital status
7. Friendships
8. Grandchildren
9. Physical abilities
10. Illness
11. Respect from others
It is the survivors who grow old

**How to live to be 110: Characteristics of supercentenarians (Schoenholten et al., 2006):**

<table>
<thead>
<tr>
<th>“Way to Shorten Your Life”</th>
<th>Relevant data</th>
<th>What are the findings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being overweight</td>
<td>BMI index</td>
<td></td>
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<tr>
<td>Drinking and driving</td>
<td>Fatalities</td>
<td></td>
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<tr>
<td>Eating inadequate fruits and vegetables</td>
<td>Food consumption</td>
<td></td>
</tr>
<tr>
<td>Being physically inactive</td>
<td>Leisure time physical activity</td>
<td></td>
</tr>
<tr>
<td>Smoking</td>
<td>Current cigarette smokers</td>
<td></td>
</tr>
</tbody>
</table>
Individual differences must be recognized

It’s not all downhill: Variations in hippocampus volume (Hedden & Gabrieli, 2004)

Normal aging is different from disease

Normal or primary aging

Impaired or secondary aging

Optimal or tertiary aging
THE MEANING OF AGE

Alternative indices of age

<table>
<thead>
<tr>
<th>Influence</th>
<th>Definition</th>
<th>Example</th>
</tr>
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<tbody>
<tr>
<td>Normative age-graded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normative history-graded</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-normative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SOCIAL FACTORS IN ADULT DEVELOPMENT AND AGING

Gender and Sex

Race

Ethnicity

Socioeconomic status

Religion

Review Points:
The Baby Boomers Grow Up

KEY LECTURE POINTS:
- Age structure of the U.S. population
- Growth of 65 plus
- Growth in centenarians
- Gender and racial variations
- Aging around the world

Age structure of the U.S. population

The Baby Boomers (and their children) will continue to have an impact on the population through 2040 and beyond
**Growth of the 65 plus population**

![Growth of the 65 plus population chart]

**Growth in centenarians**

Over one million expected by the year 2050

**GEOGRAPHIC VARIATIONS WITHIN THE U.S.**

<table>
<thead>
<tr>
<th></th>
<th>65+</th>
<th>85+</th>
</tr>
</thead>
<tbody>
<tr>
<td>State with highest NUMBER of 65+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>State with highest PERCENT of 65+</td>
<td></td>
<td></td>
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</table>
GENDER AND RACIAL VARIATIONS IN THE OVER-65 POPULATION

*Gender composition*

*Racial and ethnic composition*

AGING AROUND THE WORLD

*Developed vs. developing countries*

*Trends within the over-65 population*
### Countries With More Than 2 Million People Aged 65 and Over: 2000 and 2030

(Numbers in thousands. Ordered by rank in 2000)

<table>
<thead>
<tr>
<th>Country</th>
<th>Rank</th>
<th>65 and over</th>
<th>Rank</th>
<th>65 and over</th>
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<tbody>
<tr>
<td></td>
<td>2000</td>
<td>2030</td>
<td>2000</td>
<td>2030</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>1</td>
<td>87,538</td>
<td>239,480</td>
</tr>
<tr>
<td>India</td>
<td>2</td>
<td>2</td>
<td>46,545</td>
<td>127,429</td>
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<tr>
<td>United States</td>
<td>3</td>
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<td>35,061</td>
<td>71,453</td>
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<td>Japan</td>
<td>4</td>
<td>5</td>
<td>21,671</td>
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<td>Russia</td>
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<td>18,354</td>
<td>27,768</td>
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<td>Germany</td>
<td>6</td>
<td>8</td>
<td>13,515</td>
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<td>Italy</td>
<td>7</td>
<td>10</td>
<td>10,394</td>
<td>15,084</td>
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<td>Indonesia</td>
<td>8</td>
<td>4</td>
<td>10,046</td>
<td>34,058</td>
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<td>France</td>
<td>9</td>
<td>11</td>
<td>9,499</td>
<td>14,978</td>
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<td>United Kingdom</td>
<td>10</td>
<td>13</td>
<td>9,284</td>
<td>14,463</td>
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<tr>
<td>Brazil</td>
<td>11</td>
<td>6</td>
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<td>29,186</td>
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<td>Ukraine</td>
<td>12</td>
<td>23</td>
<td>6,847</td>
<td>8,312</td>
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<td>Spain</td>
<td>13</td>
<td>19</td>
<td>6,820</td>
<td>9,874</td>
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<td>Pakistan</td>
<td>14</td>
<td>12</td>
<td>5,829</td>
<td>14,683</td>
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<tr>
<td>Mexico</td>
<td>15</td>
<td>9</td>
<td>4,946</td>
<td>15,582</td>
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<td>Poland</td>
<td>16</td>
<td>24</td>
<td>4,736</td>
<td>8,292</td>
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<td>Bangladesh</td>
<td>17</td>
<td>14</td>
<td>4,304</td>
<td>13,211</td>
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<td>18</td>
<td>16</td>
<td>4,300</td>
<td>11,960</td>
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<td>19</td>
<td>15</td>
<td>3,968</td>
<td>12,045</td>
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<td>Canada</td>
<td>20</td>
<td>22</td>
<td>3,964</td>
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<td>Turkey</td>
<td>21</td>
<td>17</td>
<td>3,931</td>
<td>10,876</td>
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<td>Argentina</td>
<td>22</td>
<td>27</td>
<td>3,841</td>
<td>6,902</td>
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<td>Nigeria</td>
<td>23</td>
<td>25</td>
<td>3,456</td>
<td>8,241</td>
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<tr>
<td>Korea, South</td>
<td>24</td>
<td>18</td>
<td>3,301</td>
<td>10,638</td>
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<tr>
<td>Iran</td>
<td>25</td>
<td>26</td>
<td>3,031</td>
<td>7,963</td>
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<td>Romania</td>
<td>26</td>
<td>34</td>
<td>2,990</td>
<td>4,081</td>
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<td>Philippines</td>
<td>27</td>
<td>20</td>
<td>2,956</td>
<td>9,652</td>
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<td>Egypt</td>
<td>28</td>
<td>21</td>
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<tr>
<td>Australia</td>
<td>29</td>
<td>30</td>
<td>2,382</td>
<td>4,953</td>
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<td>Netherlands</td>
<td>30</td>
<td>33</td>
<td>2,165</td>
<td>4,159</td>
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</tbody>
</table>


REVIEW POINTS:
Theories & Models Part 1

KEY LECTURE POINTS:
- The life-span perspective
- Models of individual-environmental interactions
- Psychological models of development

CHANGES IN OUR UNDERSTANDING OF DEVELOPMENT

- Life-span perspective
- Contextual influences
- Developmental science

MODELS OF INDIVIDUAL-ENVIRONMENTAL INTERACTIONS

<table>
<thead>
<tr>
<th>Nature of Change</th>
<th>Organismic</th>
<th>Mechanistic</th>
<th>Interactionist</th>
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</thead>
<tbody>
<tr>
<td>Qualitative</td>
<td>Quantitative</td>
<td>Multidirectional Multidimensional</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>Passive</td>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>Biological-intrinsic maturational changes</td>
<td>External stimuli from environment</td>
<td>Reciprocal relations with environment</td>
<td></td>
</tr>
</tbody>
</table>
SOCIOCULTURAL MODELS OF DEVELOPMENT

Ecological perspective (Bronfenbrenner’s model)

Social class makes a difference: Depression in older adults (Koster et al., 2006)

The life course perspective

Ageism as a social factor in the aging process
PSYCHOLOGICAL MODELS OF DEVELOPMENT

Erikson’s psychosocial theory

Identity process theory
Your identity processes

Class results for the Survey “What is Your Identity Process?”
IAS= Stable, not likely to incorporate change into identity
IAC= Unstable, likely to change identity in response to experiences
IBL= Able to change when needed within a general framework of consistency

1. How much do you think about yourself and your experiences?
2. How clear are your goals?
3. What are your thoughts about your mistakes?
4. Do you see yourself as stable or changing?
5. How much do you think about what you do?
6. How important are the views of other people?
7. Do you think you will change as you get older?

REVIEW POINTS
Theories & Models Part 2

KEY LECTURE POINTS:
- Programmed aging theories
- Random error theories

PROGRAMMED AGING THEORIES

Gompertz Curve:
**Telomere theory of aging**

**RANDOM ERROR THEORIES**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Brief summary</th>
<th>Supporting evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-linking</td>
<td>Collagen molecules form X’s</td>
<td></td>
</tr>
<tr>
<td>Free radical</td>
<td>Free radicals cause destructive changes in cells</td>
<td></td>
</tr>
<tr>
<td>Error catastrophe</td>
<td>Mutations lead to deleterious changes</td>
<td></td>
</tr>
</tbody>
</table>

**Red wine and lifespan in mice**

**REVIEW POINTS**
Research Methods

KEY LECTURE POINTS:
- Descriptive research designs
- Layout for developmental designs
- Correlational designs
- Ethical issues in research

DESCRIPTIVE RESEARCH DESIGNS

<table>
<thead>
<tr>
<th>Type of design</th>
<th>Problem</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitudinal</td>
<td>Attrition</td>
<td></td>
</tr>
<tr>
<td>Cross-sectional</td>
<td>Cohort differences</td>
<td></td>
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</table>

SEQUENTIAL DESIGNS

<table>
<thead>
<tr>
<th>Year of Birth (Cohort)</th>
<th>Year of Testing (Time of Measurement)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>1980</td>
</tr>
<tr>
<td>1940</td>
<td>40 years old</td>
</tr>
<tr>
<td>1930</td>
<td>50 years old</td>
</tr>
<tr>
<td>1920</td>
<td>60 years old</td>
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</table>
## CORRELATIONAL DESIGNS

<table>
<thead>
<tr>
<th>Bivariate Designs</th>
<th>Multivariate Designs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**How do multivariate designs help to clarify research issues?**

Control for confounds related to age

Allow investigations of "causality"

Provide ways to examine change over time
ETHICAL ISSUES IN RESEARCH

REVIEW POINTS
Lecture 6: Physical Changes

Key Lecture Points:

- Appearance
- Mobility
- Vital bodily functions
- Bodily control systems

APPEARANCE

Skin

Hair

Body Build

Exercise can help!
MOBILITY

Muscles

Bones

Joints

Preventing sarcopenia: The Rancho Bernardo Study (Castillo et al., 2003; 2004)
## Preserving your body

Class results for the Survey “My Aging Body”

1. Eating patterns
2. Smoking-- self
3. Smoking-- friends
4. Listening to music
5. Wearing sunblock
6. Brushing and flossing
7. Shoes
8. Stress levels
9. Drinking patterns

---

## VITAL BODILY FUNCTIONS

*Cardiovascular system*
Aging in endurance athletes: Can we stop the changes? (Katzel et al., 2001)

**Respiratory system**
Urinary system

Digestive system

BODILY CONTROL SYSTEMS
Endocrine system

Growth hormone

Thyroid hormones

Melatonin

DHEA
Female sexual changes

Male sexual changes
The great debate: Hormones or no hormones?? (The latest data will be presented)

Immune system

REVIEW POINTS
# The Nervous System

## Key Lecture Points:
- Models of the aging nervous system
- Changes in sleep and circadian rhythms
- Changes in temperature control
- Sensation and perception

## NERVOUS SYSTEM

### Models of the aging nervous system

<table>
<thead>
<tr>
<th>Model</th>
<th>Proposed effects of aging</th>
<th>Relevant research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuronal fallout</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plasticity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Sleep**

Age differences in circadian rhythm (Hasher et al., 2005)

![Graph showing mean MEQ for younger and older subjects]

**Temperature control**

**SENSATION AND PERCEPTION**

**Vision**

PresbyOPIA = loss of ability to accommodate the eye
Nothing can prevent it.

Cataracts = opacities in the lens of the eye
There may be ways to prevent them.

**Hearing**

PresbyCUSIS = loss of ability to hear high-pitched tones
How can it be prevented or slowed?
Balance

How can falls be prevented in older adults?

Smell and taste

Changes in smell may relate to cognitive changes

Tooth loss can be a major contributor to loss of taste AND to depression

Complete Tooth Loss (ages 65+)
United States

[Bar chart showing percentage of complete tooth loss by income level (ages 65+).]
**Pain**

What are the contributors to pain perception in later life?

What is the impact of pain on cognitive functioning and depression?

**REVIEW POINTS**
# Health and Prevention

**Key Lecture Points:**
- Prevalence of major chronic conditions
- Cardiovascular disease
- Cancer
- Musculoskeletal disorders
- Diabetes
- COPD

<table>
<thead>
<tr>
<th>Condition</th>
<th>25–44</th>
<th>45–64</th>
<th>65–74</th>
<th>75–84</th>
<th>85+</th>
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<tbody>
<tr>
<td>Heart disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>3.7</td>
<td>13.4</td>
<td>33.1</td>
<td>42.4</td>
<td>42.0</td>
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<tr>
<td>Females</td>
<td>5.3</td>
<td>11.6</td>
<td>22.4</td>
<td>31.8</td>
<td>36.0</td>
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<tr>
<td>Hypertension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Males</td>
<td>0.4</td>
<td>30.8</td>
<td>47.1</td>
<td>51.2</td>
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<td>50.5</td>
<td>54.6</td>
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<tr>
<td>Stroke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>0.4</td>
<td>2.6</td>
<td>8.3</td>
<td>11.8</td>
<td>15.4</td>
</tr>
<tr>
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<td>2.2</td>
<td>6.1</td>
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<td>Chronic bronchitis</td>
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<td>11.6</td>
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</table>
CARDIOVASCULAR DISEASE

Facts and figures on heart disease

<table>
<thead>
<tr>
<th>Topic</th>
<th>Factual information</th>
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<tbody>
<tr>
<td>Stroke</td>
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<tr>
<td>Heart disease vs. cancer</td>
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<tr>
<td>Variations by country</td>
<td></td>
</tr>
<tr>
<td>Variations within the U.S</td>
<td></td>
</tr>
</tbody>
</table>

Risk factors for heart disease

- Sedentary lifestyle
- Smoking
- Body Weight
Class results for the Survey “Why Exercise?”

1. How often do you exercise?
2. Why do you exercise?
3. What part of your body do you work on the most?
4. Do you exercise with weights?
5. Movie or gym?
6. Do you use sunblock?
7. Do you eat high-fat foods?

THE METABOLIC SYNDROME

Waist circumference
Triglycerides
HDL cholesterol
Blood pressure
Fasting glucose
CANCER

Factors that increase cancer risk:

- Sun exposure
- Smoking
- Consumption of red meat
- Environmental carcinogens at work

DISORDERS OF THE MUSCULOSKELETAL SYSTEM

Osteoarthritis

Osteoporosis
DIABETES

Also related to metabolic syndrome; a risk factor for other diseases

Statewide variations parallel those for stroke

COPD

Combination of two chronic conditions:
  1. Chronic emphysema
  2. Chronic bronchitis

REVIEW POINTS
Dementia and Related Disorders

Key Lecture Points:
- Alzheimer’s disease prevalence
- Symptoms
- Biological changes
- Possible causes

PREVALENCE

The Infamous “5 Million” (and counting)

- U.S. estimates are at 5 to 5.5 million and constantly increasing
- Estimates from other countries do not agree
- Why are the U.S. figures so high?

SYMPTOMS

![Chart Charting the Course of Healthy Aging, MCI, and AD](chart.png)
### BIOLOGICAL CHANGES

#### CAUSES OF ALZHEIMER’S DISEASE

<table>
<thead>
<tr>
<th>Possible cause</th>
<th>Proposed processes</th>
<th>Evidence</th>
</tr>
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<tbody>
<tr>
<td>Amyloid cascade hypothesis</td>
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<td></td>
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<tr>
<td>Caspase theory</td>
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<td></td>
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<tr>
<td>ApoE abnormalities</td>
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<td></td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------</td>
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<td>---</td>
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<tr>
<td>Hippocampus electrical activity</td>
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<tr>
<td>Environmental</td>
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<tr>
<td>Diet</td>
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</tbody>
</table>

**TREATMENTS**

Anticholinesterases

Memantine

Antioxidants

*An integrative approach to treatment (Callahan et al., 2006)*
Differential diagnosis

REVIEW POINTS
Basic Cognitive Functions

Key Lecture Points:
- Information processing
- Aging and driving
- Aging and memory scorecard
- Factors that can influence memory
- Memory training studies

INFORMATION PROCESSING

Psychomotor speed: The general slowing hypothesis

Attention
AX-CPT paradigm

<table>
<thead>
<tr>
<th>Percent of trials</th>
<th>Cue</th>
<th>Probe</th>
<th>Target response (yes or no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>A (valid cue)</td>
<td>X (probe)</td>
<td>Yes</td>
</tr>
<tr>
<td>10</td>
<td>B (invalid cue)</td>
<td>Y (invalid probe)</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>A (valid cue)</td>
<td>Y (invalid probe)</td>
<td>No</td>
</tr>
<tr>
<td>10</td>
<td>B (invalid cue)</td>
<td>X (probe)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Age differences on the AX-CPT.

(a) AX-CPT errors by trial type

(b) AX-CPT reaction time by trial type

(Rush et al., 2006)
AGING AND DRIVING

Class results for the Survey “Aging Driver Survey”

1. What would cause you to be most concerned?

2. Should older drivers be forced to take road tests?

3. (If yes) At what age?

4. What is of most concern with aging drivers?

5. How comfortable would you feel telling an older relative not to drive?

6. What would make it most difficult to do so?

7. Who would be best at telling the older driver?

8. What aspect of driving would be most difficult to give up?

9. What conditions are hardest for older drivers?

10. Which driver do you think is safer?

Accident statistics
Deaths in Passenger Vehicles, 2005

Deaths per 100,000 people by seating position, age, and gender.

Crash Involvement Rate Per Million Miles, 2005

Passenger-related vehicular crashes, including those that are fatal and nonfatal, per million miles by age.

Alcohol and Fatal Crash Involvement, United States 2003

Percent by age group of drivers with blood alcohol levels 0.08 g/dl or higher involved in fatal crashes by age group.
Who takes to the road? Factors that predict driving exposure and avoidance (Vance et al., 2006)

MEMORY

Working memory

Multicomponent Model of Working Memory

Theoretical explanations:
Processing resources
Inhibitory deficit
Long-term memory

**Effects of aging on memory: The score card**

<table>
<thead>
<tr>
<th>Abilities that decline</th>
<th>Abilities that do not decline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working memory</td>
<td>Flashbulb memory</td>
</tr>
<tr>
<td>Episodic memory</td>
<td>Semantic memory</td>
</tr>
<tr>
<td>Source memory</td>
<td>Procedural memory</td>
</tr>
<tr>
<td>False memory</td>
<td>Implicit memory</td>
</tr>
<tr>
<td>Tip-of-the-tongue (names)</td>
<td>Autobiographical memory (“reminiscence bump“)</td>
</tr>
<tr>
<td>Prospective memory</td>
<td></td>
</tr>
</tbody>
</table>

**Factors that can influence memory performance in older adults**

*Identity, self-efficacy, control beliefs, and stereotype threat*

**Health-related behaviors**
Memory training studies

REVIEW POINTS
Language, Problem-Solving, and Intelligence

Key Lecture Points:
- Language and aging
- Everyday problem solving
- Intelligence
- Wisdom

LANGUAGE

Cognitive aspects of language
Overall, there is stability, but there are changes nevertheless.

Effects of aging on language: The score card

<table>
<thead>
<tr>
<th>Factors that contribute to decline</th>
<th>Factors that contribute to preservation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower reading rate</td>
<td>Semantic memory is retained or greater</td>
</tr>
<tr>
<td>Changes in hearing and speech perception</td>
<td>Able to get the “gist” of a story</td>
</tr>
<tr>
<td>Slowing of cognitive functions</td>
<td>No problem with paralinguistic elements of speech</td>
</tr>
<tr>
<td>Retrieval deficits</td>
<td>Activate the right hemisphere more</td>
</tr>
<tr>
<td>Simpler grammatical structures</td>
<td>Greater experience with language</td>
</tr>
<tr>
<td>Working memory deficits</td>
<td>More cognitive complexity</td>
</tr>
</tbody>
</table>

Social elements of language

The communication predicament model:
Class results for the Survey “Elderspeak”

1. Do you talk louder to an older adult?
2. How do older adults prefer to be called?
3. Do physical limitations = cognitive deficits?
4. How would you plan events in a nursing home?
5. Should older adults talk about the past?

EVERYDAY PROBLEM SOLVING

Characteristics of problem solving
- Transform current state into desired state
- The “problem” of problem solving occurs when insufficient information is provided

Problem solving in adulthood
The trade-off in problem solving for older adults:
INTELLIGENCE
The structure of intelligence according to crystallized-fluid theory

Avoiding the “attraction effect” in older vs. younger adults (Tentori et al., 2001)
Factors that affect the aging of intelligence

Training intelligence: The ACTIVE study

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Cognitive outcomes</th>
<th>Functional outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reasoning training</td>
<td>Reasoning</td>
<td>Everyday problem solving</td>
</tr>
<tr>
<td>Memory training</td>
<td>Memory</td>
<td>ADL and IADL functioning</td>
</tr>
<tr>
<td>Speed training</td>
<td>Attentional speed</td>
<td>Everyday speed of processing</td>
</tr>
</tbody>
</table>

Each training group improved in cognitive outcomes
Reasoning group improved on IADL
Speed of processing group (booster session) improved on everyday speed of processing
THE PSYCHOLOGY OF WISDOM

Wisdom as expert knowledge in the pragmatics of life

Testing the Limits

Selective optimization with compensation

REVIEW POINTS
Personality and Patterns of Coping

Key Lecture Points:
- Psychodynamic theories
- Five Factor Model
- Socioselectivity theory
- Cognitive perspectives on the self
- Midlife crisis

PSYCHODYNAMIC PERSPECTIVES

Freud’s contributions
- Little to say about personality development in adulthood
- Paved the way for studies on ego psychology and defense mechanisms
TRAIT APPROACHES

Five Factor Model

Openness
- Fantasy
- Aesthetics
- Feelings
- Actions
- Ideas
- Values

Conscientiousness
- Competence
- Order
- Dutifulness
- Achievement
- Self-discipline
- Deliberation

Extraversion
- Warmth
- Gregariousness
- Assertiveness
- Activity
- Excitement seeking
- Positive emotions

Agreeableness
- Trust
- Straightforwardness
- Altruism
- Compliance
- Modesty
- Tender-mindedness

Neuroticism
- Anxiety
- Hostility
- Depression
- Self-consciousness
- Impulsiveness
- Vulnerability

Research based on the Five Factor Model
Longitudinal study of the facets of conscientiousness
Health and personality

*Type A personality (hostility)*

*Anxiety (neuroticism)*

*Conscientiousness*

**SOCIAL COGNITIVE APPROACHES**

*Emotions and aging: Socioemotional selectivity theory*

- We try to maximize gains and minimize risks in our relationships
- As endings draw closer, people (of all ages) focus more on emotional rewards and less on informational rewards in relationships
- Older people (and everyone facing an ending) prefer to spend time with those who increase those emotional rewards
What's in a face? Age differences in attentional viewing (Isaacowitz et al., 2006)

COGNITIVE PERSPECTIVE

Possible selves

We are motivated to achieve a hoped-for self and avoid a feared self

Coping and control

Older adults may be MORE rather than less capable of coping with stress

Identity process theory

Although identity balance is most beneficial to maintaining self-esteem in older adults, there are advantages to identity assimilation, or focusing on the positive.
MIDLIFE CRISIS THEORIES AND FINDINGS

Theories of the midlife crisis

Levinson’s concept of the “life structure”

Class results for the Survey “What is Your Identity Process?”

1. Do you know anyone who has experienced a midlife crisis?
2. If yes—how old was this person?
3. If yes—why did the person have a midlife crisis?
4. How prevalent is the midlife crisis?
5. Do you think you will have one?
6. Why do people have one (if they do)?
7. What advice would you give to someone who has a midlife crisis?
Critiques of the midlife crisis

Most people do not have them and if they do, it’s not a “midlife” crisis (Wethington, 2000)

What’s the final verdict?

REVIEW POINTS
Relationships Part 1

Key Lecture Points:
- Marriage
- Cohabitation
- Divorce
- Widowhood
- Perspectives on long-term relationships

MARRIAGE AND INTIMATE RELATIONSHIPS

Marriage

Some facts about marriage

Cohabitation

The Cohabitation Effect
Same-sex couples

How are these relationships similar to or different from hetero-couples?

Divorce and remarriage

![Graph showing probability of divorce in women by age at first marriage. The x-axis represents years (1 yr., 3 yrs., 5 yrs., 10 yrs., 15 yrs.), and the y-axis represents probability (0.0 to 0.7). The graph is color-coded for different age groups: less than 18, 18–19, 20–24, and 25 and over.]
Widowhood

Other effects of widowhood on health

Psychological perspectives on long-term relationships
**What really happens during the empty nest: Factors predicting sexuality in midlife women (Dennerstein et al., 2006)**

**REVIEW POINTS**
Relationships Part 2

**Key Lecture Points:**
- Family living situations
- The transition to parenthood
- Adult parent-child relationships
- Grandparenting
- Friendships

**FAMILIES**

The transition to parenthood

“Doing Gender”: Adjustment within couples and marital satisfaction

Attachment and the transition to parenthood

The role of expectations
**ADULT PARENT-CHILD RELATIONSHIPS**

*Concepts in adult parent-child relationships*

<table>
<thead>
<tr>
<th>Concept</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental schism</td>
<td></td>
</tr>
<tr>
<td>Role reversal</td>
<td></td>
</tr>
<tr>
<td>Filial maturity</td>
<td></td>
</tr>
<tr>
<td>Filial anxiety</td>
<td></td>
</tr>
<tr>
<td>Filial obligation (piety)</td>
<td></td>
</tr>
</tbody>
</table>

*Intergenerational solidarity model*

*Harmony is the norm: Intergenerational solidarity in the Netherlands (Van Gaalen & Dykstra, 2006)*
Class results for the Survey “Your Grandparent”

1. Presents for me
2. Presents for my grandparent
3. Spending time
4. Advice
5. Visits
6. Congratulations
7. Activity
8. Call or email
9. Parents and grandparents
10. Help from grandparent
Grandparents raising grandchildren

The Skip Generation Family

Types of Grandparents
FRIENDSHIPS

*Patterns of friendships in adulthood*

REVIEW POINTS
Work and Vocational Development

Key Lecture Points:
- Labor force participation by age
- Gender and educational patterns in income
- Holland’s RIASEC model
- Super’s self-concept stages

WORK PATTERNS IN ADULTHOOD

Age distribution of labor force patterns

He et al., 2005
Gender patterns

The Gender Gap

Educational level
VOCATIONAL DEVELOPMENT

Holland’s vocational development theory (RIASEC model)

Congruence between person and environment predicts vocational patterns.
Class results for the Survey “What is Your Vocational Profile?”

1. Realistic
2. Investigative
3. Artistic
4. Social
5. Enterprising
6. Conventional

Super’s self-concept theory

Factors that promote embeddedness in the organization (i.e. company) vs. occupation (i.e. profession) vary by stage in Super’s theory (Ng & Feldman, 2007)

<table>
<thead>
<tr>
<th>Stage</th>
<th>Organizational Embeddedness</th>
<th>Occupational Embeddedness</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishment</td>
<td>Organizational socialization</td>
<td>Generalizable skills</td>
<td>Social ties</td>
</tr>
<tr>
<td></td>
<td>Organization-specific skills</td>
<td></td>
<td>Mentorship</td>
</tr>
<tr>
<td></td>
<td>Work hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>Management &amp; leadership responsibilities</td>
<td>Accumulation of career attainments</td>
<td>Career plateauing</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reconciliation of goal discrepancy</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Family status</td>
</tr>
<tr>
<td>Disengagement</td>
<td>Pension funds &amp; insurance benefits</td>
<td>Leadership role in profession</td>
<td>Risk aversion</td>
</tr>
</tbody>
</table>
Revisions to Super’s self-concept stages:

- Recycling
- Plateauing
- The Boundaryless Career
- The Protean Career

REVIEW POINTS
Vocational Satisfaction and Retirement

Key Lecture Points:
- Intrinsic-extrinsic factors and vocational satisfaction
- Work stress
- Work-family conflict
- Vocational performance and age
- Retirement effects on individual

VOCATIONAL SATISFACTION

Intrinsic and extrinsic factors

*Self-determination theory (Gagne, & Deci, 2005)*
Work stress

When work makes you sick: Stress and the metabolic syndrome (Chandola et al., 2006)

Conflict between work and family

What factors predict the effect of work on family? (Wayne et al., 2006)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Work→ Family enrichment</th>
<th>Family→ Work enrichment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Hours of household respons.</td>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Hours at work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of children</td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married</td>
<td></td>
</tr>
<tr>
<td>Work identity</td>
<td>Positive</td>
<td></td>
</tr>
<tr>
<td>Family identity</td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Family emotional support</td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Managerial support</td>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Organizational time demands</td>
<td>Negative</td>
<td>Negative</td>
</tr>
</tbody>
</table>
AGE AND VOCATIONAL PERFORMANCE

Fluid-crystallized distinction and vocational performance
(Kanfer & Ackerman, 2004)

**Crystallized abilities**
Performance is:
- effort-insensitive once you reach the expert level
- relatively unaffected by changes in ability

**Fluid abilities**
Performance is:
- resource limited
- not enhanced by greater effort

Age discrimination in Employment Act (ADEA)
FY 2007 ADEA charges:

Total number of charges = 16,548  Total number resolved = 14,146

61% were ruled to have no reasonable cause
$51.5 million paid out in benefits (not including litigation)
RETIREMENT

Proceeds in phases:
- Anticipatory period
- Decision to retire
- RETIREMENT (last day of work)
- Continual adjustment
- Changes in activity patterns

### Table 1.2
Reasons for Retirement for the Population Aged 50 and Over by Age: 2000

<table>
<thead>
<tr>
<th>Age</th>
<th>Poor health</th>
<th>Wanted to do other things</th>
<th>Didn't like work</th>
<th>Spend time with family</th>
<th>“Forced,” not family or health</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 to 58</td>
<td>38</td>
<td>24</td>
<td>25</td>
<td>4</td>
<td>32</td>
</tr>
<tr>
<td>59 to 61</td>
<td>40</td>
<td>35</td>
<td>30</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td>62 to 64</td>
<td>31</td>
<td>18</td>
<td>27</td>
<td>7</td>
<td>34</td>
</tr>
<tr>
<td>65 to 67</td>
<td>28</td>
<td>16</td>
<td>29</td>
<td>5</td>
<td>37</td>
</tr>
<tr>
<td>68 to 70</td>
<td>28</td>
<td>13</td>
<td>25</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>71 to 74</td>
<td>31</td>
<td>13</td>
<td>19</td>
<td>4</td>
<td>26</td>
</tr>
<tr>
<td>75 to 79</td>
<td>40</td>
<td>25</td>
<td>14</td>
<td>4</td>
<td>27</td>
</tr>
<tr>
<td>80 and over</td>
<td>46</td>
<td>25</td>
<td>10</td>
<td>8</td>
<td>19</td>
</tr>
</tbody>
</table>

### Table 1.3
Employment Status of the Population Aged 55 and Over by Age and Sex: 2003

<table>
<thead>
<tr>
<th>Age and sex</th>
<th>Employed Total</th>
<th>Total Percent of population</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 to 64</td>
<td>13,305</td>
<td>8,733</td>
<td>65.6</td>
<td>89.6</td>
</tr>
<tr>
<td>65 to 69</td>
<td>4,449</td>
<td>1,397</td>
<td>31.4</td>
<td>65.2</td>
</tr>
<tr>
<td>70 and over</td>
<td>10,047</td>
<td>1,188</td>
<td>11.8</td>
<td>53.3</td>
</tr>
<tr>
<td>Women</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 to 64</td>
<td>14,423</td>
<td>7,866</td>
<td>54.5</td>
<td>76.1</td>
</tr>
<tr>
<td>65 to 69</td>
<td>5,142</td>
<td>1,119</td>
<td>21.8</td>
<td>50.7</td>
</tr>
<tr>
<td>70 and over</td>
<td>14,616</td>
<td>905</td>
<td>6.2</td>
<td>39.0</td>
</tr>
</tbody>
</table>

He et al., 2005
The effects of retirement on the individual

<table>
<thead>
<tr>
<th>Theory</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role theory</td>
<td>Roles provide source of fulfillment</td>
</tr>
<tr>
<td></td>
<td>Loss of work role is harmful</td>
</tr>
<tr>
<td>Continuity theory</td>
<td>Retirees maintain previous sense of identity</td>
</tr>
<tr>
<td></td>
<td>Retirement is not a crisis</td>
</tr>
<tr>
<td>Life course perspective</td>
<td>Normative timing of events</td>
</tr>
<tr>
<td></td>
<td>Retirement stressful only when unexpected</td>
</tr>
</tbody>
</table>

Retirement and health

Resource model of retirement
Factors that influence adjustment to retirement:

- Off-time or on-time
- Control
- Financial resources
- Amount of time to prepare
- Socioeconomic level
- Continuity of career

REVIEW POINTS
Mental Health

Key Lecture Points:
- Major Axis I disorders
- Major Axis II disorders
- Suicide
- Elder abuse
- Treatment issues

The DSM-IV-TR
- Major psychiatric reference manual for diagnosis
- 5 axes on which symptoms of disorders are organized
- Not specific to older adults

PSYCHOLOGICAL DISORDERS IN ADULTHOOD

Major Axis I disorders in adulthood

Mood disorders
*Frequency of Major Depressive Disorder and depressive symptoms*

<table>
<thead>
<tr>
<th>Population measure</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-year incidence (SAMHSA)</td>
<td>4% in 55 and older</td>
</tr>
<tr>
<td>Cumulative lifetime prevalence</td>
<td>14% in 60 and older</td>
</tr>
<tr>
<td>Symptoms in community older adults</td>
<td>8 to 20%</td>
</tr>
<tr>
<td>Symptoms in primary care settings</td>
<td>17-35%</td>
</tr>
<tr>
<td>Suicidality (among those with MDD)</td>
<td>7.3% made plans, 3.9% attempted in 55 and older</td>
</tr>
</tbody>
</table>

Older adults are less likely to report mood symptoms and more likely to report somatic or other symptoms.
Less prevalent than Major Depressive Disorder = .1% of older adults

Related to vascular disorders when it first appears in later adulthood

White matter hyperintensities are more likely to be present

---

**Increased risk for depression associated with:**

- Obesity
- Diabetes
- Asthma
- Hypertension
- Arthritis

Related to:
- Ulcers
- Heart disease
- Back/neck pain
- Chronic headache
- Multiple pains

(Scott et al., 2007)

---

**Bipolar disorder**

- Less prevalent than Major Depressive Disorder = .1% of older adults
- Related to vascular disorders when it first appears in later adulthood
- White matter hyperintensities are more likely to be present

---

**Anxiety disorders**

Anxiety disorders often fail to be properly diagnosed in older adults.
Anxiety and its impact: Findings from the Health, Aging, and Body Composition Study (Mehta et al., 2007)

Substance Abuse

Peak of psychoactive drug use is 18-20; 22.3% have used within last 30 days (SAMHSA, 2006)

Psychoactive drug use estimates in older adults (Simoni-Wastila & Yang, 2006):
- Any substance = 38% of VA patients 60+
- Prescription drugs = 16% of 65+ in outpatient treatment
- Cocaine = 2% of emergency department visits 60+

Alcohol abuse in older adults (NIAAA, 1998):
- 14% of older adults seen in emergency rooms and hospitals
- Becoming increasingly prevalent in retirement communities

Major Axis II disorders in adulthood

The “maturation hypothesis” of personality disorders and aging
SUICIDE

Facts about suicide in older adults:

ELDER ABUSE

Prevalence of Major Forms of Elder Abuse

- Self-Neglect: 37.2%
- Caregiver Neglect: 20.4%
- Physical Abuse: 10.7%
- Emotional/Psychological Verbal Abuse: 14.8%
- Sexual Abuse: 1.0%
- Other: 1.2%
- Financial Exploitation: 14.7%
TREATMENT ISSUES IN MENTAL HEALTH CARE

*Treatments for Major Depressive Disorder in older adults*

Interpersonal therapy

Exercise treatment

Psychotherapeutic agents
### APAGuidelines for Psychological Practice with Older Adults

<table>
<thead>
<tr>
<th>Area</th>
<th>Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudes</strong></td>
<td>Work within scope of competence</td>
</tr>
<tr>
<td></td>
<td>Be aware of attitudes toward older adults</td>
</tr>
<tr>
<td><strong>General knowledge</strong></td>
<td>Gain knowledge about aging</td>
</tr>
<tr>
<td></td>
<td>Be aware of dynamics of aging process</td>
</tr>
<tr>
<td></td>
<td>Understand diversity</td>
</tr>
<tr>
<td></td>
<td>Be familiar with biology and health of aging</td>
</tr>
<tr>
<td><strong>Clinical issues</strong></td>
<td>Know about cognitive changes</td>
</tr>
<tr>
<td></td>
<td>Understand problems in daily living</td>
</tr>
<tr>
<td></td>
<td>Know about psychopathology</td>
</tr>
<tr>
<td><strong>Assessment</strong></td>
<td>Be familiar with assessment instruments</td>
</tr>
<tr>
<td></td>
<td>Understand problems in using instruments designed for younger populations</td>
</tr>
<tr>
<td></td>
<td>Know how to interpret performance on cognitive tests</td>
</tr>
<tr>
<td><strong>Intervention, consultation, and other service provision</strong></td>
<td>Know about efficacy of interventions</td>
</tr>
<tr>
<td></td>
<td>Adapt interventions for families and environmental modifications</td>
</tr>
<tr>
<td></td>
<td>Understand issues involved in treatment in specific settings</td>
</tr>
<tr>
<td></td>
<td>Recognize issues related to prevention and health promotion</td>
</tr>
<tr>
<td></td>
<td>Understand provision of consultation in assessment</td>
</tr>
<tr>
<td></td>
<td>Understand importance of interdisciplinary approaches</td>
</tr>
<tr>
<td></td>
<td>Understand specific legal and ethical issues</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Obtain continuing education, training, supervision, and consultation</td>
</tr>
</tbody>
</table>
REPORTS OF SUBJECTIVE DISTRESS

Class results for the Survey “Serious Psychological Distress”

1. Sad
2. Nervous
3. Restless or fidgety
4. Hopeless
5. Everything an effort
6. Worthless

CLASS AVERAGE:
30-day prevalence of serious psychological distress by age and sex, National Health Interview Study 2001–2004.

**REVIEW POINTS**
Long-Term Care

Key Lecture Points:
- Institutional facilities for long-term care
- Financing of long-term care
- Legislative issues in long-term care
- Psychological issues in long-term care

INSTITUTIONAL FACILITIES FOR LONG-TERM CARE

NURSING HOMES

- **Skilled nursing facilities**
  - Intensive nursing services

- **Intermediate care facilities**
  - Health-related services

- **Residential care facilities**
  - Board and care homes
  - Group homes
  - Assisted living facilis.
  - Adult foster care

![Rate of nursing home residence among people age 65 and over, by age group, 1985, 1995, 1997, and 1999](chart.png)

*Note: Beginning in 1997, population figures are adjusted for net underenumeration using the 1990 National Population Adjustment Matrix from the U.S. Census Bureau. People residing in personal care or domiciliary care homes are excluded from the numerator. Reference population: These data refer to the resident population. Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Nursing Home Survey.*
THE FINANCING OF LONG-TERM CARE

Medicare
There are 4 components to Medicare.

PART A Hospital Insurance:
Inpatient care in hospitals
Inpatient care in a skilled nursing facility
Hospice care services
Home health care services

PART B Medical Insurance (pay a premium of $96 in 2008)
Medically necessary services
Preventive services

PART C Medicare Advantage Plans (run by private companies)
Extra benefits
Operate through provider networks

PART D Prescription Drug Coverage
Coverage of prescription drugs after deductibles and through a “donut hole”
### Standard Benefit 2008

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beneficiary pays the first $275 (Deductible)</td>
<td></td>
</tr>
<tr>
<td>Beneficiary pays 25% of the next $2,235 (Deductible)</td>
<td>$558.75</td>
</tr>
<tr>
<td><strong>Initial Benefit Period</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Donut Hole &quot;Threshold&quot; = $2,510</strong></td>
<td></td>
</tr>
<tr>
<td>That is, what the beneficiary and the plan have spent ($275 + $2,235 = $2,510)</td>
<td></td>
</tr>
<tr>
<td>Beneficiary pays 100% of the next $3,216.25 (The &quot;Donut Hole&quot;)</td>
<td></td>
</tr>
<tr>
<td>&quot;Catastrophic Coverage&quot; begins after</td>
<td></td>
</tr>
<tr>
<td>the beneficiary has spent $4,050 (this is the total out-of-pocket spending</td>
<td></td>
</tr>
<tr>
<td>requirement)</td>
<td></td>
</tr>
<tr>
<td>($275 + $558.75 + $3,216.25 = $4,050)</td>
<td></td>
</tr>
<tr>
<td>OR, put another way:</td>
<td></td>
</tr>
<tr>
<td>Total spending (For beneficiary &amp; the plan) for Catastrophic Coverage: $5,726.25</td>
<td></td>
</tr>
<tr>
<td>($275 + $2,235 + $3,216.25 = $5,726.25)</td>
<td></td>
</tr>
<tr>
<td>Minimum cost sharing in Catastrophic Benefit Period: $2.25 (Generic) and $5.60 (Brand)</td>
<td></td>
</tr>
</tbody>
</table>

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**Medicare spending by the U.S. Government**
Table 2. Budget Outlays by Function
[Billions of dollars]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>National defense</td>
<td>495.3</td>
<td>521.8</td>
<td>571.9</td>
<td>606.5</td>
<td>26.5</td>
<td>50.0</td>
<td>34.7</td>
</tr>
<tr>
<td>International affairs</td>
<td>34.6</td>
<td>29.5</td>
<td>35.1</td>
<td>36.1</td>
<td>-5.0</td>
<td>5.5</td>
<td>1.1</td>
</tr>
<tr>
<td>General science, space, and technology</td>
<td>23.6</td>
<td>23.6</td>
<td>24.9</td>
<td>26.6</td>
<td>0.0</td>
<td>1.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Energy</td>
<td>0.4</td>
<td>0.8</td>
<td>1.8</td>
<td>1.4</td>
<td>0.4</td>
<td>1.1</td>
<td>-0.4</td>
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<tr>
<td>Natural resources and environment</td>
<td>28.0</td>
<td>33.1</td>
<td>35.2</td>
<td>32.9</td>
<td>5.0</td>
<td>2.1</td>
<td>-2.3</td>
</tr>
<tr>
<td>Agriculture</td>
<td>26.6</td>
<td>26.0</td>
<td>20.1</td>
<td>19.9</td>
<td>-0.6</td>
<td>-5.9</td>
<td>-0.2</td>
</tr>
<tr>
<td>Commerce and housing credit</td>
<td>7.6</td>
<td>6.2</td>
<td>0.2</td>
<td>-2.0</td>
<td>-1.4</td>
<td>-6.0</td>
<td>-2.3</td>
</tr>
<tr>
<td>Transportation</td>
<td>67.9</td>
<td>70.2</td>
<td>74.6</td>
<td>79.3</td>
<td>2.3</td>
<td>4.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Community and regional development</td>
<td>26.3</td>
<td>54.5</td>
<td>32.6</td>
<td>24.7</td>
<td>28.3</td>
<td>-21.9</td>
<td>-8.0</td>
</tr>
<tr>
<td>Education, training, employment, and social services</td>
<td>97.6</td>
<td>118.6</td>
<td>94.0</td>
<td>82.7</td>
<td>21.0</td>
<td>-24.6</td>
<td>-11.2</td>
</tr>
<tr>
<td>Health</td>
<td>250.6</td>
<td>252.8</td>
<td>268.5</td>
<td>280.6</td>
<td>2.2</td>
<td>15.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Medicare</td>
<td>298.6</td>
<td>329.9</td>
<td>372.3</td>
<td>391.6</td>
<td>31.2</td>
<td>42.4</td>
<td>19.4</td>
</tr>
<tr>
<td>Income security</td>
<td>345.8</td>
<td>352.5</td>
<td>365.4</td>
<td>380.8</td>
<td>6.6</td>
<td>12.9</td>
<td>15.4</td>
</tr>
<tr>
<td>Social security</td>
<td>523.3</td>
<td>548.5</td>
<td>566.5</td>
<td>612.5</td>
<td>25.2</td>
<td>38.0</td>
<td>26.0</td>
</tr>
<tr>
<td>Veterans benefits and services</td>
<td>70.2</td>
<td>69.8</td>
<td>72.4</td>
<td>83.4</td>
<td>-0.3</td>
<td>2.6</td>
<td>11.0</td>
</tr>
<tr>
<td>Administration of justice</td>
<td>40.0</td>
<td>41.0</td>
<td>45.3</td>
<td>47.0</td>
<td>1.0</td>
<td>4.3</td>
<td>1.7</td>
</tr>
<tr>
<td>General government</td>
<td>17.0</td>
<td>18.2</td>
<td>18.8</td>
<td>20.7</td>
<td>1.2</td>
<td>0.5</td>
<td>2.0</td>
</tr>
<tr>
<td>Net interest</td>
<td>184.0</td>
<td>226.6</td>
<td>239.2</td>
<td>261.3</td>
<td>42.6</td>
<td>12.6</td>
<td>22.1</td>
</tr>
<tr>
<td>Allowances ¹</td>
<td>7.4</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-5.4</td>
</tr>
<tr>
<td>Undistributed offsetting receipts ²</td>
<td>-65.2</td>
<td>-68.3</td>
<td>-81.8</td>
<td>-56.3</td>
<td>-3.0</td>
<td>-13.6</td>
<td>-4.4</td>
</tr>
</tbody>
</table>

1. Allowances are included in budget totals to cover certain budgetary transactions that are expected to increase or decrease outlays, receipts, or budget authority but that are not reflected in the program details.
2. Undistributed offsetting receipts are two categories of collections that are governmental in nature and that are not credited to expenditure accounts: Receipts from performing business-like activities, such as proceeds from selling Federal assets or leases, and shifts from one account to another, such as agency payments to retirement funds.

LEGISLATIVE ISSUES IN LONG-TERM CARE

GAO 2007 Report: Efforts to strengthen federal enforcement have not deterred some homes from repeatedly harming residents


Source: GAO analysis of LTC, OSCAR, and CMS regional office and state enforcement case files.
Characteristics of residents

Current top ten deficiencies in nursing homes

<table>
<thead>
<tr>
<th>Deficiency</th>
<th>Percent</th>
<th>Deficiency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food sanitation</td>
<td></td>
<td>Housekeeping</td>
<td></td>
</tr>
<tr>
<td>Quality of care</td>
<td></td>
<td>Comp. care plan</td>
<td></td>
</tr>
<tr>
<td>Professional standards</td>
<td></td>
<td>Infection control</td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td>Pressure sores</td>
<td></td>
</tr>
<tr>
<td>Accident prevention</td>
<td></td>
<td>Dignity</td>
<td></td>
</tr>
</tbody>
</table>

(Harrington et al.)

Being depressed and in a nursing home (Harris & Cooper, 2006)
PSYCHOLOGICAL ISSUES IN LONG-TERM CARE

Class results for the Survey “How much control do you need over your environment?”

1. Privacy
2. Noise level
3. Messiness
4. Temperature
5. Sharing bathroom
6. Sleeping habits
7. Decorating

Competence press model of adaptation
Suggestions for improving institutional care

- Meet needs of the individual
- Use behavioral methods
- Create sense of neighborhood
- Group staffing by residents, not tasks
- Adopt team approach

REVIEW POINTS
Death and Dying

Key Lecture Points:
- Mortality facts and figures
- Cultural perspectives on death and dying
- Issues in end-of-life care
- Theories of bereavement

Class results for the Survey “Planning Your Funeral”

1. Organ donation
2. Funeral home
3. How long
4. Who speaks
5. Display body
6. Readings and music
7. What would wear
8. How honor me
9. Cremation or burial
10. How I feel about survey
MORTALITY FACTS AND FIGURES

U.S. deaths in 2004
CULTURAL PERSPECTIVES

*Shifts in attitudes from ancient times to the present*

ISSUES IN END-OF-LIFE CARE

Advance Directives and the Patient Self-Determination Act

*Physician-assisted suicide and euthanasia*
### Getting services for the dying “right” (Dy & Lynn, 2007)

<table>
<thead>
<tr>
<th>Care</th>
<th>Trajectory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rapid decline over a few weeks or months before death</strong></td>
<td>Chronic illness with intermittent exacerbations</td>
</tr>
<tr>
<td><strong>Model of care</strong></td>
<td>Integration with hospice or palliative</td>
</tr>
<tr>
<td><strong>Specific care needs</strong></td>
<td>Maximize continuity Plan for rapid decline, changing needs, and death Manage patient's symptoms at home Provide support for caregiver</td>
</tr>
</tbody>
</table>
BEREAVEMENT

Theories of bereavement

ATTACHMENT TO THE DECEASED:

The "old" view  The "new" view

REVIEW POINTS
Successful Aging

Key Lecture Points:
- The keys to successful aging
- Studies on age and creative production
- Simonton’s model of aging and creativity
- The Age Busters

THE KEYS TO SUCCESSFUL AGING

- Absence of disease
- High physical and cognitive functioning
- Engagement with life
- Social support and involvement with others

What makes a hardy older person hardy? (Hardy et al., 2004)
PRODUCTIVITY AND CREATIVITY

Early studies on age and creativity

Age and Productivity by Discipline as Judged by Dennis (1966)

Simonton’s model of age and creative productivity

One hit-wonders vs. the long-lived creative geniuses

Productivity and Career Age

In these curves, four models of productivity are shown based on creative potential as low or high and career onset as early or late.

Other implications of Simonton’s model

The neuroscience of creativity

The role of the right hemisphere in creative thought
SUCCESSFUL AGING: FINAL PERSPECTIVES

Class results for the Survey “Age Busters”

Most popular choices:

1. Why chose
2. How age affects the way celebrities are viewed
3. How Age Busters are viewed in the media
4. Has society changed its attitudes toward Age Busters
5. How will Age Busters be treated in the future

REVIEW POINTS