Optimizing Successful Aging: An Integrative Approach

Manfred Diehl, Ph.D.
Human Development and Family Studies
Director, Center on Aging
Colorado State University
Number of people age 65 and over, by age group, selected years 1900-2000 and projected 2010-2050

Note: Data for 2010-2050 are projections of the population. Reference population: These data refer to the resident population. Source: U.S. Census Bureau, Decennial Census and Projections.
Common Views About Aging

- Changes that come with aging are all **negative** (“going downhill”).

- Aging-related processes are not amenable to **intervention** (“running its course”).

- Aging-related changes are **irreversible** (“losses are permanent”).
Aging Minds ...

Superman in his later years

© Far Side
“Because of declines in disability rates and increases in active life expectancy, more and more adults experience successful aging“ (Rowe & Kahn, 1998).

People’s lives do not only have more years, but the given years also have more life.
Claire Willi
Age: 100 yrs, 5 months
Takes a dance class every day and “is as elegant as she is energetic.”

Bill Hamm
Age: 72
Retired, U.S. Air Force
Competing in triathlons
Optimizing Successful Aging

- What is successful aging?
- Reasons why it is meaningful to talk about successful aging?
- How can successful aging be achieved?
Optimizing Successful Aging

- Normal (primary) aging
- vs. Pathological (secondary) aging
- vs. Successful aging
Optimizing Successful Aging

**Successful aging**

- Aging that is characterized by
  - Low risk of disease and disease-related disability
  - High mental and physical function; and
  - Active social and productive engagement with life.
Why is it Meaningful to Talk about Successful Aging?

- To be old does *not* (necessarily) mean to be sick.

- The prevalence of certain *age-related diseases* has declined (e.g., cardiovascular disease, stroke).

- Not only has life expectancy increased, but the period of *active life expectancy* has increased.

- Overall *disability rate* in older adults has declined.
Why is it Meaningful to Talk about Successful Aging?

- Greater knowledge about lifestyle factors and how they impact the aging process.
- Greater knowledge about the psychological factors that affect the aging process (e.g., learning, emotion regulation, coping skills).
Why is it Meaningful to Talk about Successful Aging?

- Greater knowledge about human plasticity; that is, the reserve capacities that humans can activate.
  - Human plasticity: Neurogenesis = Formation of new neurons in the brain due to increased physical exercise.
  - Certain processes of aging can not only be slowed down, but they can be reversed.
Optimizing Successful Aging

- Avoiding disease
- Engagement with life
- Maintaining high cognitive and physical functioning
Avoiding Disease
Optimizing Successful Aging

Avoiding Disease

- Can not eliminate the effects of our *genetic endowment*, yet!

- However, even the human genome has a certain *plasticity* that scientists are just starting to understand.

- Evidence supporting the importance of *environmental factors*:
  - Research on the effects of *physical activity* → physical and psychological benefits
  - Research on the effects of *healthy nutrition*.
  - Research on the effects of *healthy self-care habits* → stress management, sleep hygiene, tobacco and alcohol consumption
Optimizing Successful Aging

Effects of Physical Activity

- **Risks of physical *inactivity***:
  - 45% greater risk of developing coronary artery disease
  - 60% greater risk of developing osteoporosis
  - 40% greater likelihood to develop colon cancer

- **Benefits of physical *activity***:
  - Improved muscle coordination, reaction time, strength, balance and stability → reduced risk for falls
  - HDL (good) cholesterol increases an average of 4.6% with exercise
  - Increased bone size and bone density → less bone loss and osteoporosis
  - Aerobic exercise prompts the release of mood lifting hormones that promote a sense of well-being and reduce stress
  - In studies of women already being treated for breast cancer, moderate physical activity cut rates of recurrence and death in half.
Optimizing Successful Aging

Engagement with Life
Optimizing Successful Aging

Engagement with Life

- **Leading an active life**
  - Develop areas of interest and nurture them
  - Be open to new experiences → lifelong learning

- **Form and cultivate meaningful and emotionally rewarding relationships**
  - Notion of the “social convoy”
  - Importance of a social support network
  - Importance of close relationships

- **Engage in productive activities**
  - Be involved in your community (i.e., volunteer) → Experience Corps
  - Age productively (i.e., never stop learning)
  - Older adults as a “natural resource”
Optimizing Successful Aging

Maintaining High Cognitive Functioning

Predictors of successful intellectual aging as identified in the Seattle Longitudinal Study (Schaie, 2005):

- Absence of cardiovascular and other chronic diseases
- Living in favorable environmental circumstances
- Involvement in cognitively challenging activities
- Self-report of a flexible personality
- Satisfaction with one’s life accomplishments in midlife or early old age
Optimizing Successful Aging

Maintaining High Physical Functioning
Optimizing Successful Aging

Maintaining High Physical Functioning

- Staying *physically active*
  - Avoiding impairment and disability due to *disuse*
  - Don’t be a couch potato!

- Adopting *healthy habits*
  - Maintain optimal body weight
  - Eat healthy food--and don’t supersize
  - Control the amount and duration of stress
  - Drink alcohol in moderation
  - Don’t smoke tobacco
  - Adopt good sleeping habits (amount and quality)

- Have regular *medical check-ups*
  - Health care should be preventive rather than curative
  - Recognize health problems before they become a disease
Optimizing Successful Aging

- Successful aging does not begin at age 60!

- Whether a person ages successfully or not is, to a good extent, determined by lifelong behaviors and choices—many of which are adopted at an earlier point in life.

- Need to take a lifespan approach to successful aging—or more broadly speaking to successful human development.
Successful aging is not for Sissies!!!
Thank you!