



NORTH CENTRAL REGION

Aging Network

Youth in Science: Gerontology/Lifespan Development Discussion Outline

Introduction and Overview

This discussion outline introduces students to the scientific study of human aging. It highlights the aging process and helps students differentiate between myths and facts about older adulthood. The way aging is discussed at home and in the media can shape how kids perceive older adults, often reinforcing harmful stereotypes that they are weak or easily confused. However, research on aging reveals that many of these ideas are misleading, providing more accurate information about the aging process benefits young people. What we believe about aging can affect how we approach aging and growing older. If kids learn about the aging process early, they can have a more positive view and learn strategies to enhance their aging journey (e.g. protect skin from the sun, exercise regularly, etc.).

Recommended Readings



Mayo Clinic. (n.d.). Aging: What to expect. Retrieved from <https://www.mayoclinic.org/healthy-lifestyle/healthy-aging/in-depth/aging/art-20046070>

Strasser, H. (2017). The “Art of Aging” from an ergonomics viewpoint- Wisdoms on age. *Occupational Ergonomics*, 13(S1), 1-24. DOI: 10.3233/OER-170250

Tornstam, L. (2011). Maturing into gerotranscendence. *The Journal of Transpersonal Psychology*, 43(2), 166-180. Retrieved from <https://www.atpweb.org/jtparchive/trps-43-11-02-000.pdf#page=56>

Instructions

- Before facilitating the session, thoroughly review the outline provided. As the facilitator, you are encouraged to:
- Ensure that the session is age-appropriate for the participants.
- Identify any areas that may require clarification or enhancement during the session.
- Prepare any necessary materials, particularly ensuring there is a pencil and paper for each youth participant.

The outline below serves as your guide through a short (20 to 30 minutes), interactive session that aims to introduce youth to the gerontology/scientific study of aging/lifespan development. Content is framed as questions to encourage audience brainstorming. Use your expertise to deliver content confidently and tailor it to the needs of your audience.

Discussion Outline

1. Introduce yourself and explain your professional role.
2. Clarifying questions
 - What is age?
 - At what age does a person become an older adult?
 - Explain that age 60 or 65 years is the used in the scientific study of human aging
3. Define Gerontology and contrast it to geriatrics
4. *Activity:* What do you want to be when you are 65?

Supplies: Each student will need a piece of paper and a writing utensil.

Directions: Ask the students to write or draw a picture of what they want to be when they are 65. Allow them 2-3 minutes to complete the writing/drawing activity. Invite students to share with the group what they wrote or drew.



5. Understanding normal aging

A. Physical and Cognitive Changes Over Time

Physical Declines (Expected but Manageable):

- 💪 Reduced muscle strength – important for mobility and balance
- ⚡ Slower reaction time – can affect driving or quick decision-making
- 👁 Vision changes (presbyopia) – difficulty focusing on nearby objects due to lens stiffening
- 👂 Hearing loss – more common after age 60
 - 🔊 Noise-related hearing decline from modern environments: concerts, machinery, urban living
- 🎵 Ears lack self-repair – repeated exposure to loud sounds leads to permanent damage

Processing and Learning:

- 🧠 Longer time to process sensory information – sight, sound, and touch may feel less immediate
- 📚 Slower acquisition of new skills – learning is still possible, but may need more repetition
- ⌚ Extended time needed for healing and recovery – immune and cellular repair processes slow down

B. Positive Shifts with Age

Cognitive Growth:

- 🧠 Crystallized intelligence increases – deeper knowledge, improved judgment
- 🧘 Emotional maturity – more nuanced thinking, better self-regulation



Wisdom & Perspective:

- 👵 Older adults tend to draw from lived experience to make better decisions, offer guidance, and find meaning

C. Analogy for Care: “The Car or Wooden Furniture Example”

“The Car or Wooden Furniture Example”

- 💡 With proper care, a car or well-crafted piece of furniture can last decades. So can a person’s body and mind.
- 🔧 Regular maintenance (like exercise, sleep, good nutrition) preserves strength and vitality.
- 🧴 Protection from excess wear (noise, stress, inactivity) matters just like polishing wood or changing oil.

6. What affects how we age?

- Diet/nutrition
- Exercise/movement
- Stress management
- Sleep
- Smoking/vaping
- Alcohol consumption
- Drug abuse
- Culture
- Access to health care
- Access to dental care



7. Careers in aging (select a few to focus on) See some examples below:

Art Therapy | Case Work Management | Education
Elder Law | Geriatric Advocacy/Care Management | Grant Writing
Grief Counseling | Health Education | Mental Health Counseling
Nursing | Nursing Home Management | Occupational Therapy
Pharmacy Work | Public Policy | Rehabilitation | Physical Therapy
Research | Senior Housing | Social Work | Wellness Care

8. Where do gerontologists work?

Assisted Living Facilities | Community Health Clinics | Activity Centers
Hospitals | Hospices | Government Agencies | Colleges and Universities
Long-term/Residential Care Facilities | Private Consulting/Corporations
Rehabilitation Center | Park Districts | Gyms | Non-Profit Organizations
Social Service Organizations

9. What are the **top three things** to do to age well as younger people?

- ☀ Protect body from the sun (e.g., long-sleeved shirts, sunscreen, hats, sunglasses etc.).
- 👂 Protect hearing from loud noises (e.g. turn down the volume when using headphones or earbuds, wear hearing protection when using machinery).
- 👟 Exercise the body often (endurance/aerobic, balance, strength, and flexibility).

10. Wrap up with time for questions and answers.

Optional Discussion Questions:

- *What surprised you about normal aging?*
- *What positive aging characteristics do you see in the older adults that you know?*
- *What are you doing now to support aging well in the future?*



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The North Central Region Aging Network (NCRAN) is a collaborative of Extension professionals dedicated to improving the health and well-being of adults in later life through science-based strategies. Visit us at: <https://ncran.org>