

**“Human Development”
Middle and Late
Adulthood:
Physical, Cognitive and
social Development**

Dr.Kanwal Fatima

Development Across the Lifespan

Physical Development in Middle Adulthood

- Middle adulthood is the time when most people first become aware of the gradual changes in their bodies that mark the aging process.
- Height reaches a maximum during the 20's for most people, and remains stable til about age 55.
- After age 55, bones become less dense and ultimately women lose 2 inches and men lose 1 inch in height.
- Both men and women continue to gain weight

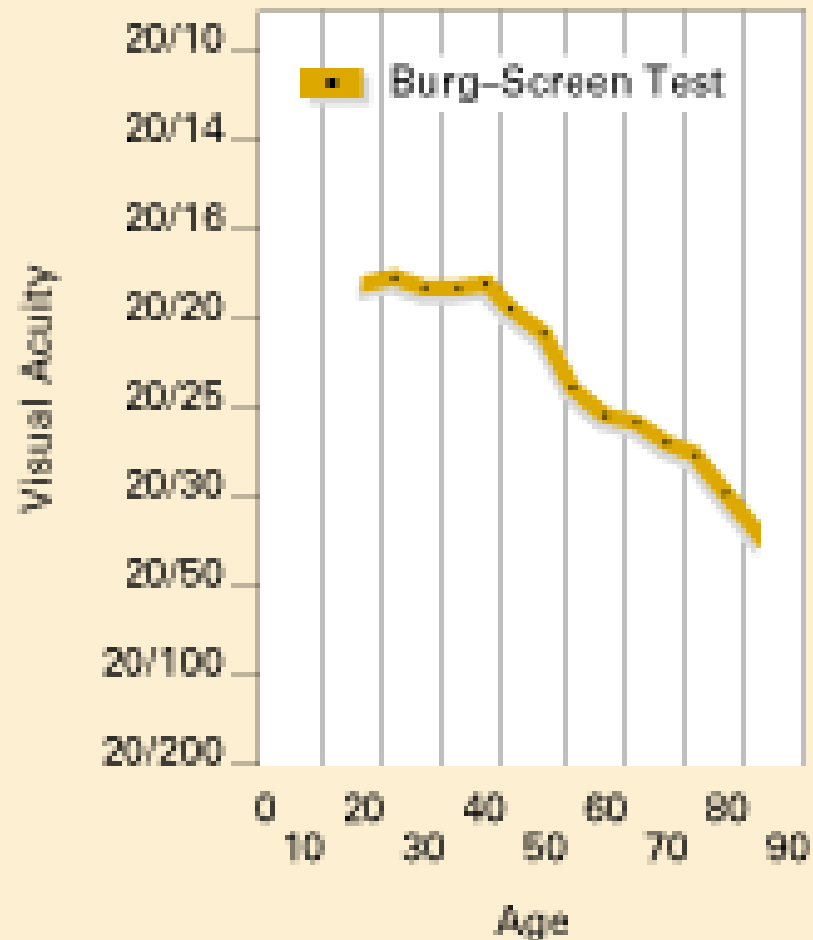
Middle Adulthood

- ❑ Muscular strength, sensory abilities and cardiac output begin to decline after the mid-twenties.
- ❑ Reaction time increases slightly.
- ❑ Around age 50, women go through menopause, and men experience decreased levels of hormones and fertility.
- ❑ **Declines also occur in depth perception, distance perception, the ability to view the world in three dimensions, and night vision.**

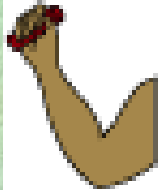
The Decline of Visual Acuity

Around age 40, the ability to discern fine detail begins to drop.

(visual acuity - the ability to discern fine spatial detail in both close and distant objects - begins to decline.)

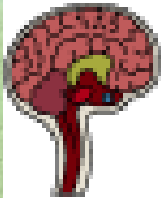


The advantages of exercise include



Muscle System

- Slower decline in energy molecules, muscle mass, blood supply, speed of movement, stamina
- Slower increase in fat & muscle soreness



Nervous System

- Slower decline in processing central nervous system impulses
- Slower increase in variations in speed of motor neuron impulses



Circulatory System

- Maintenance of lower levels of harmful cholesterol
- Decreased risk of high blood pressure, atherosclerosis, heart attack, stroke

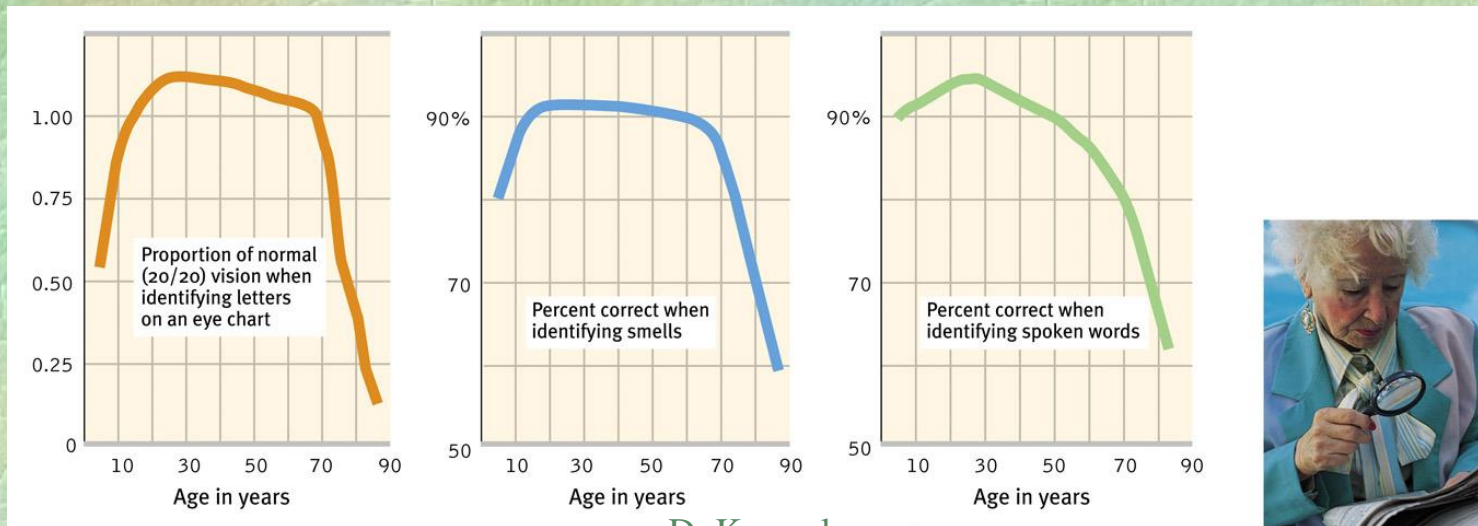


Skeletal System

- Slower decline in bone minerals
- Decreased risk of fractures & osteoporosis

Late Adulthood

After age 70, hearing, distance perception, and the sense of smell diminish, as do muscle strength, reaction time, and stamina. After 80, neural processes slow down, especially for complex tasks.



Michael Newman / PhotoEdit

External:

- Hair color turns gray to white and may thin out. Skin wrinkles as it loses elasticity and collagen. Height will shorten from one to four inches as posture changes and disk cartilage of the backbone thins.

Internal:

- The brain becomes smaller and lighter, but retains structure and function in the absence of disease. Blood flow to the brain decreases and neurons may decline in some parts of the brain. The heart's capacity to pump blood declines; the blood vessels harden and shrink. The digestive and respiratory systems become less efficient. Muscle fibers decrease in size and amount, and become less efficient at utilizing oxygen, and some hormones are produced at lower levels.

Reaction time decreases. Peripheral slowing hypothesis suggests that overall processing declines in the peripheral nervous system. Generalized slowing hypothesis proposes that processing in all parts of the nervous system become less efficient.

- Perception of time increases.
- Sensitivity of the senses decrease.
- Malnutrition becomes a threat perhaps in part because the taste of food is less appealing.

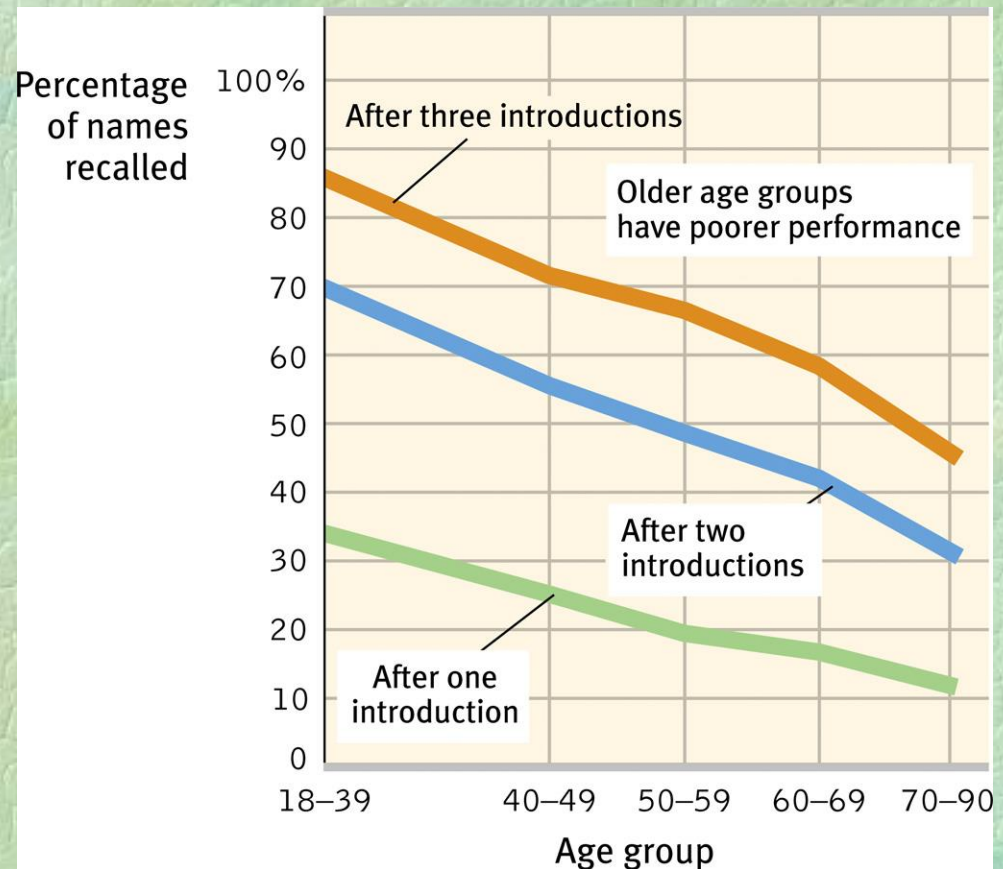
Aging and Memory

As we age, we remember some things well. These include recent past events and events that happened a decade or two back.

However, recalling names becomes increasingly difficult.

There is no uniform pattern of intellectual decline. Memory decline is not universal, and seems to occur less in societies where the aged are held in high esteem.

→ Dementia



Aging and Intelligence

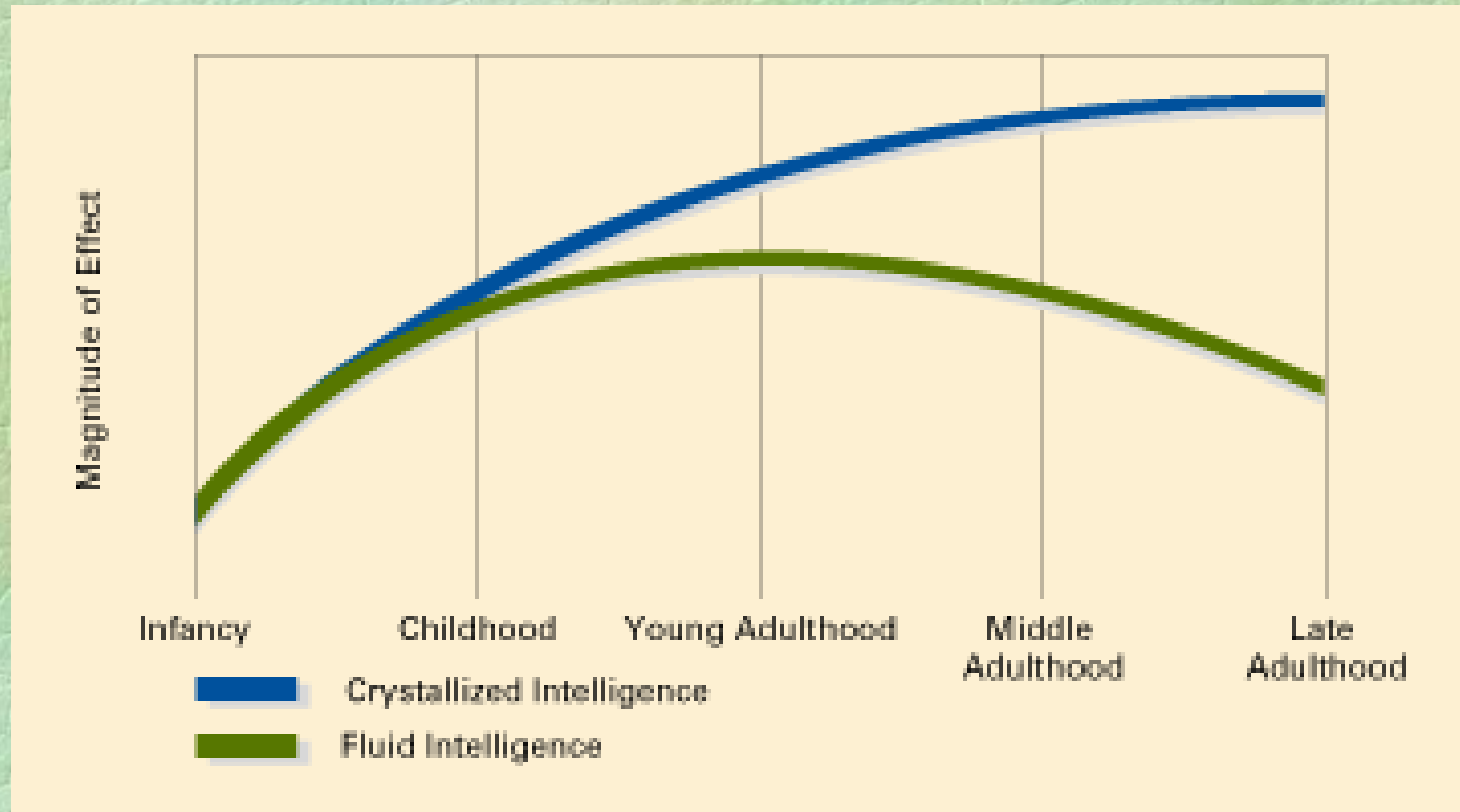
Crystallized & Fluid Intelligence

- Many researchers believe there are two kinds of intelligence.
 - **FLUID INTELLIGENCE** *is the ability to deal with new problems and situations.*
 - *Fluid intelligence is inductive reasoning, spatial orientation, perceptual speed, and verbal memory.*
 - *Fluid intelligence does decline with age.*

(Crystallized & Fluid Intelligence, continued)

- ❑ **CRYSTALLIZED INTELLIGENCE** is the store of information, skills, and strategies that people have acquired through education and prior experiences, and through their previous use of fluid intelligence.
- ❑ Crystallized intelligence includes numerical and verbal abilities, such as solving a crossword puzzle or a mathematical problem.
- ❑ Crystallized intelligence holds steady or increases with age.

Changes in Crystallized & Fluid Intelligence



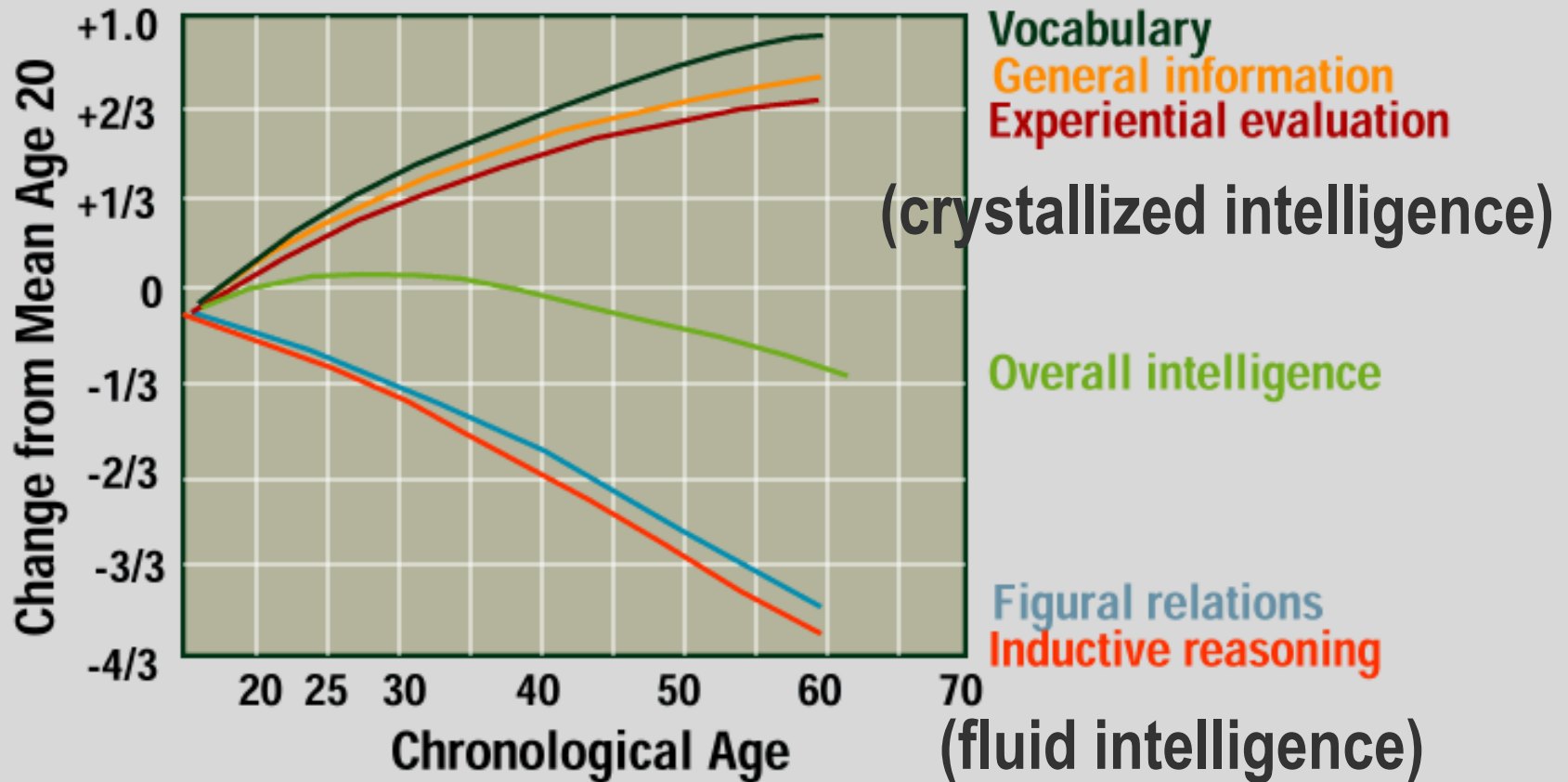
Integrity vs. Despair

65 years until death

Main Question: "Have I lived a full life?"

Virtue: Wisdom

- As we grow older and become senior citizens we tend to slow down our productivity and explore life as a retired person. It is during this time that we contemplate our accomplishments and are able to develop integrity if we see ourselves as leading a successful life. If we see our life as unproductive, or feel that we did not accomplish our life goals, we become dissatisfied with life and develop despair, often leading to depression and hopelessness. The final developmental task is retrospection: people look back on their lives and accomplishments. They develop feelings of contentment and integrity if they believe that they have led a happy, productive life. They may instead develop a sense of despair if they look back on a life of disappointments and unachieved goals.

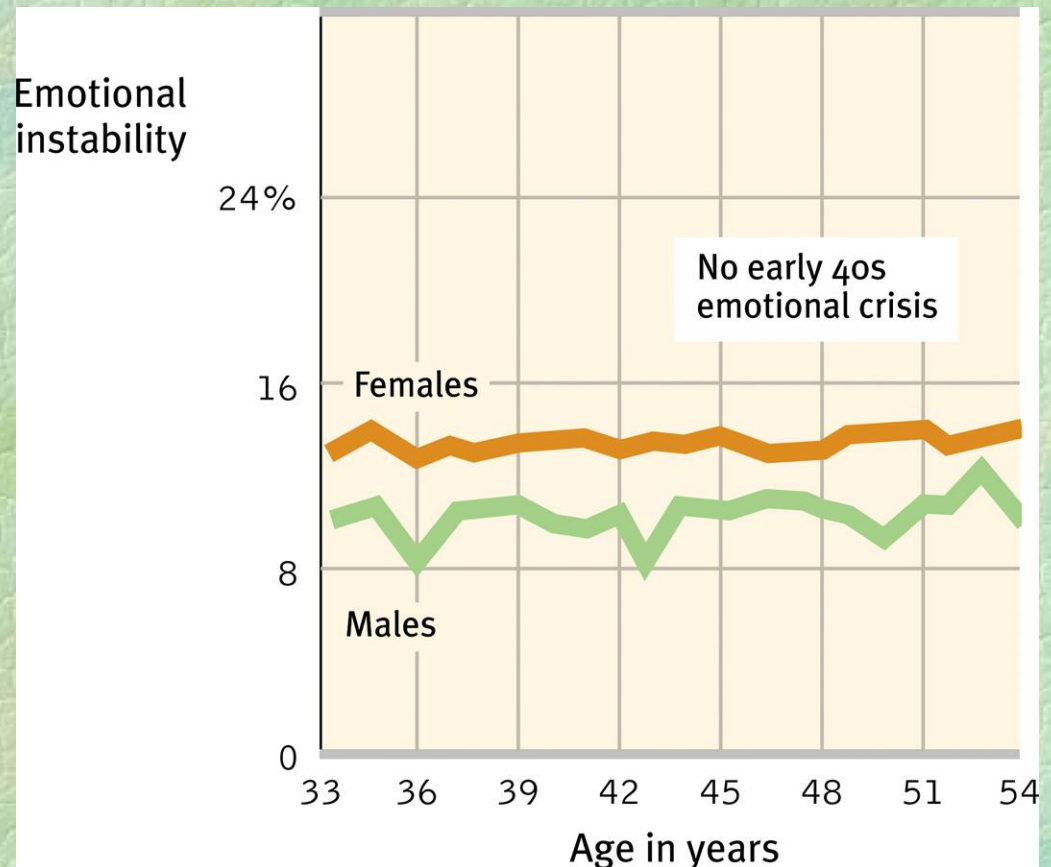


Social Development

Many differences between the young and old are not simply based on physical and cognitive abilities, but may instead be based on life events associated with family, relationships, and work.

Adulthood's Ages and Stages

Psychologists doubt that adults pass through an orderly sequence of age-bound stages. Mid-life crises at 40 are less likely to occur than crises triggered by major events (divorce, new marriage).



Neuroticism scores, 10,000 subjects
(McCrae & Costa, 1996).

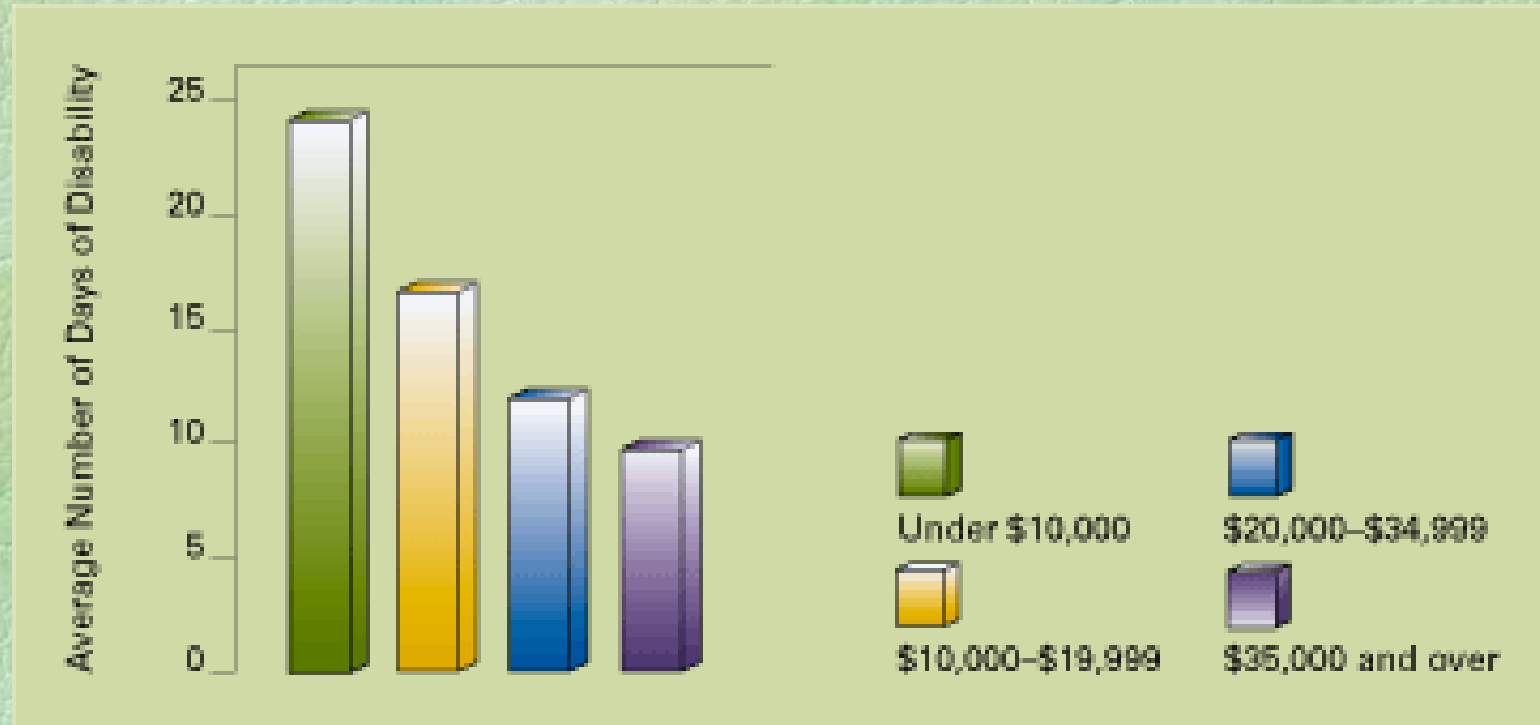
Adulthood's Commitments

Happiness stems from working in a job that fits your interests and provides you with a sense of competence and accomplishment.



Charles Harbut/ Actuality

Disability & Income Level



Workers living in poverty are more likely to become disabled than those with higher income levels. Why?

Health and aging

- Heart disease, cancer, and stroke become the leading cause of death. People become more susceptible to disease as the immune system weakens. Most older people have at least one chronic, long-term condition, such as arthritis or hypertension.

Reflections on Two Major Developmental Issues

Continuity and Stages

Researchers who view development as a slow, continuous process are generally those who emphasize experience and learning. Those with a biological perspective, on the other hand, view maturation and development as a series of genetically predisposed steps or stages. These include psychologists like Piaget, Kohlberg and Erikson.

Developmental Issues

Stability and Change

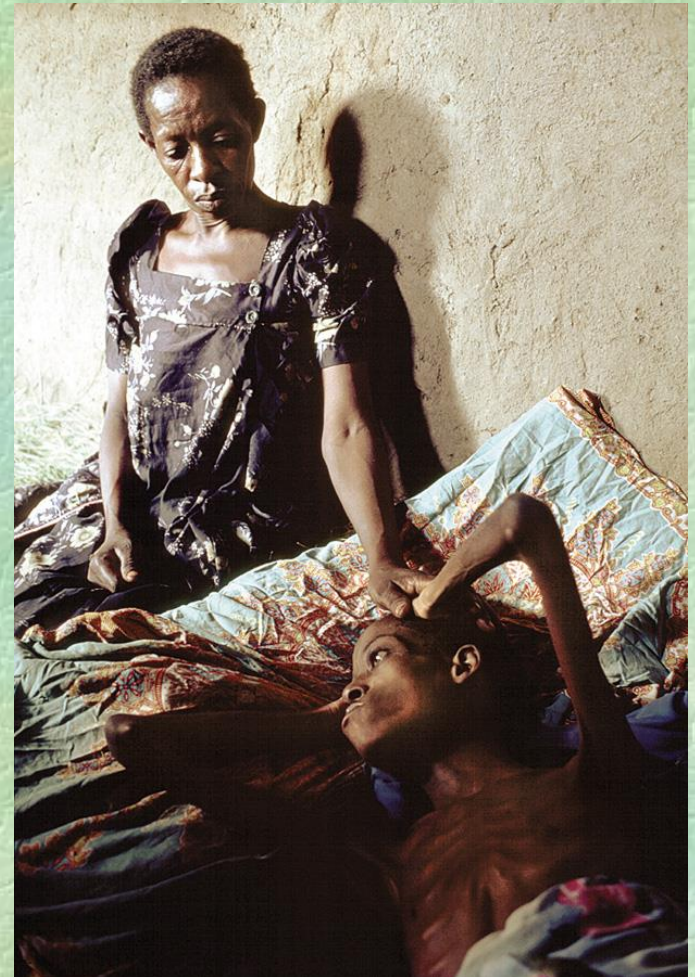
Lifelong development requires both stability and change. Personality gradually stabilizes as people age. However, this does not mean that our traits do not change over a lifetime. Some temperaments are more stable than others.

Death and Dying

The definitions include functional death where there is the absence of a heartbeat and breathing, and brain death where there is a cessation of all signs of brain electrical activity. Death can occur across the lifespan.

The “normal” range of reactions or grief stages after the death of a loved one varies widely. Grief is more severe if death occurs unexpectedly. People who view their lives with a sense of integrity (in Erikson’s terms) see life as meaningful and worthwhile.

Dr.Kanwal



Chris Steele-Perkins/ Magnum Photos

Reaction to death

- Before age 5, children ; they may tend to think of death in terms of sleep
- After age 5, it is not universal, but happens to some people.
- **Bad things** happen to other people(adolescents).
- young adults who face death may do so with anger and resentment at the unfairness of the world.
- more realistic understanding of death(Middle Adulthood)
- late adulthood people develop a level of certainty that they will someday die