

Lifespan development

Keywords: lifespan development, developmental changes, cognitive and social development

Rachel Wu, Ph.D.

University of California, Riverside

The human lifespan consists of several sequential stages: infancy, childhood, adolescence, young adulthood, middle-age, and older adulthood. Because salient changes typically occur at each stage, many researchers have tended to specialize in one area, such as child development or gerontology. However, it is also important to study development across the lifespan, not just within lifespan stages. Some researchers utilize a lifespan developmental approach by studying how early childhood experiences, such as exposure to toxins or good schooling, might lead to positive or negative effects in aging adulthood. Other researchers investigate early signs of later-diagnosed disorders, such as autism spectrum disorder or reading impairments. Recently, more aging researchers have started investigating how beneficial aspects in early childhood experiences, such as Montessori education for preschoolers, may be adapted for older adults, especially those with Alzheimer's disease or dementia. This entry will provide a brief overview of four prominent lifespan theories focusing on information-seeking and socio-emotional well-being, three types of influences that account for individual differences in growth and decline trajectories across the lifespan, and methods for investigating lifespan effects.

Over the past few decades, at least four theories have been put forth to describe behavioral changes that occur within different domains (e.g., psychosocial, cognitive, etc.) throughout the lifespan. According to Dr. Erik Erikson, the lifespan consist of eight stages, in which an individual's ego is not fixed, but constantly changing. Specifically, at each stage, it is

theorized that the ego attempts to obtain a balance between conflicting states (e.g., engaging versus not engaging in activities). Another theory posits that the acquisition of knowledge is more relevant earlier in the lifespan, while application of knowledge is more relevant later in the lifespan. Dr. Paul Baltes' selective optimization with compensation theory suggests that earlier in the lifespan, gains exceed losses, while the opposite is the case later in the lifespan, encouraging older adults to be more selective and minimize losses. Finally, Dr. Laura Carstensen's socioemotional selectivity theory posits that individuals become more selective with how they spend their time, where older (compared to younger) adults are more motivated to prioritize more meaningful activities. In sum, these four lifespan theories contribute a great deal to what is currently understood about the changes that occur throughout the lifespan.

In addition to lifespan theories, there are three types of influences that account for the differences and similarities among individual lifespan trajectories. The first type of influence is classified as normative age-graded influences, which include commonly experienced biological and environmental changes that occur at particular chronological ages, such as puberty in adolescence. Of the three types of influences, normative age-graded influences are the only type to account for any similarities in developmental trajectories among all individuals, regardless of historical time period. Normative history-graded influences are the second type of influences. This type typically results in cohort effects, which are generational differences in development due to similarly experienced environmental factors specific to a particular historical time period, such as The Great Depression. The third type is non-normative influences, which comes from person-specific life events, such as injuries, that result in developmental differences among individuals. Overall, the ways in which individuals develop across the lifespan is highly dependent on these three types of influences.

Given that certain influences engender changes throughout the lifespan, it is important to understand the methods used to measure those changes and the advantages and disadvantages associated with each one. A longitudinal study assesses groups of individuals at two or more time points over an extended period of time, such as days or years. This type of study controls for unwanted effects due to historical time periods, but can have the potential to be quite costly and lengthy. A cross-sectional study entails measuring and comparing individuals who are at different points in the lifespan, such as young adults versus older adults, within the same historical time period. While this type of study is typically less costly and can provide quick results, it does not control for historical time period (cohort) effects. Cohort sequential designs combine the first two types of studies. Specifically, it consists of assessing several age groups at one time point and at least during one other time point. Cohort sequential studies are perhaps the optimal method in many respects because they include the advantages of both longitudinal and cross-sectional studies, while minimizing their respective disadvantages.

Overall, while investigating specific domains within each stage of the lifespan is important, it is also informative to study the pattern of changes that occurs across stages. In doing so, we may acquire a deeper understanding of human functioning from infancy to aging adulthood.

Further reading

Baltes, P. B., Reese, H. W., & Lipsitt, L. P. (1980). Life-span developmental psychology.

Annual review of psychology, 31(1), 65-110.

Siegler, R. S., DeLoache, J. S., & Eisenberg, N. (2003). *How Children Develop*. New York: Macmillan.

Stuart-Hamilton, I. (2000). *The psychology of ageing: An introduction*. Philadelphia: J. Kingsley Publishers.

Schaie, K. W., & Willis, S. L. (Eds.). (2010). *Handbook of the Psychology of Aging*. Academic

Press.