Integrating Varieties of Life Course Concepts

Duane F. Alwin

Department of Sociology and Center for Life Course and Longitudinal Studies, Pennsylvania State University, University Park.

A body of work referred to as the "life course" framework (also known as "life course theory," the "life course paradigm," and the "life course perspective") has been increasingly used to motivate and justify the examination of the relationships among variables in social and behavioral science, particularly in the study of population health and aging. Yet, there is very little agreement on what some of these concepts mean, and there is hardly any agreement on what the "life course" is. This article focuses on the different ways in which the concept of "life course" is used in the contemporary study of aging and human development, particularly with regard to health and well-being. Clarification is given for how "life course" is distinguished from "life span" and "life cycle," among other "life" words. This work reviews the conceptual literature on the life course, beginning with its formative years in the 1960s and 1970s, through to the present time. Detailed research of several literatures across disciplines revealed five different uses of the term "life course": (a) life course as time or age, (b) life course as life stages, (c) life course as events, transitions, and trajectories, (d) life course as life-span human development, and (e) life course as early life influences (and their cumulation) on later adult outcomes. To the extent the concept of life course has a multiplicity of meanings that are at variance with one another, this is problematic, as communication is thereby hindered. On the other hand, to the extent the concept of life course involves a rich tapestry of different emphases, this is a good thing, and the diversity of meanings should be retained. This paper proposes a conceptual integration based in part on Riley's age stratification model that resolves the various meanings of life course into one general framework. Coupled with a demographic conceptualization of the life course, this framework embeds the concept of "life course" within a broader perspective of life-span development. This framework is proposed as an integrated perspective for studying the causes and consequences of "life course events and transitions" and understanding the manner by which "life events" and the role transitions they signify influence the life-span development of outcomes of interest across stages of the life cycle.

Key Words: Age status—Age stratification—Aging—Cohorts—Human development—Life course—Life cycle—Life histories—Life span—Life stages.

DURING recent years, the concept of the *life course* has gained considerable popularity in the social and behavioral sciences. The life course approach has become the "new wave" program for studying aging and human development as a dynamic and heterogeneous phenomenon (O'Rand & Krecker, 1990, p. 248). It has been characterized variously as a "perspective" (Elder, 1975), as a "paradigm" (Elder, 1995), or as a "theory" (Elder, 1997a, 1997b, 1999; Elder, Johnson, & Crosnoe, 2003; Elder & Shanahan, 2006). Although there appears to be some debate over whether there is such a thing as a *theory of the life course* (for contrasting views, see Elder et al. [2003], George [2003], and Shanahan and Macmillan [2008]), it has been overwhelmingly embraced as a valuable contribution to the study of human behavior.

The term "life course" is now in common use across a broad range of disciplines and specialties. In Elder's words, "the study of life course and human development has become a flourishing field . . . extending across substantive and theoretical boundaries . . . (and) life course thinking now appears in most disciplines and specialty areas" (1997b, p. 939). In making these observations, Elder (1997b) gave no indication of any incompatibility between what he viewed as "life course thinking" and what others describe as the "life-span perspective." Writing some 15 years earlier, for example, Featherman (1983, p. 2) described the

"life-span perspective" on human development and behavior, which posits that "developmental changes in human behavior occur from conception to death, and arise from a matrix of biological, psychological, social, historical, and evolutionary influences and from their timing across the lives of individuals." Interestingly, in his massive coverage of this topic within the disciplines of sociology, psychology, anthropology, and social history, Featherman (1983) used the term "life course" sparingly, suggesting that it was embedded in the larger perspective of life-span development.

These two perspectives—what Mayer (2003) characterizes as "life course sociology" and "life-span psychology"—now share center stage in the analysis and interpretation of human development and behavioral change. But, are "life course" and "life-span" perspectives on development and aging the same, or are they different? And if different, how do they differ? It is not always clear from the ways in which the key concepts are used. It is increasingly common, for example, to see students of human development and aging simply use the two terms interchangeably, the term "life course" as a synonym for "life," "life cycle," or the "span of life" or even as a synonym for "aging" or even "human development" itself.

Mayer (2003, p. 463) argues that there are important differences between the two perspectives. He suggests that lifespan psychology "views development across the life span primarily as changes of genetically and organically based functional capacities and as behavioral adaptation" and that life course sociology, in contrast, "aims to understand the evolution of life courses primarily as the outcome of institutional regulation and social structural forces." Increasingly, however, the two perspectives incorporate aspects of the other domain, and there is considerable overlap between them. Both include many of the same elements, as I argue later, and there is substantial need for integration and synthesis. Before we can achieve such integration, we must first, however, focus on a clarification of the concepts used in each framework.

I have encountered five different uses of the term "life course" in the current literature, which I will discuss in this essay. My position is that if a concept, such as "life course," is so important to the future of interdisciplinary research on human development and aging, and if it is meanings are at variance with one another, this is problematic. The term is far too new to be found in Webster's or any other dictionary of the English language, so we cannot rely on an authoritative source reflecting "usage norms" to reconcile these differences. In this paper, I discuss these five different concepts of the life course and their value for the study of aging and human development. I hope to accomplish the dual purposes of achieving a greater degree of conceptual clarity and of promoting an understanding of life course and its potential to illuminate the nature of human lives and demographic processes.

THE MEANING OF LIFE "WORDS"

The meaning of the word "life course" is not commonly shared by all who use it, and as I argue here, it is often confused with other concepts. It is one of several words used in the social and behavioral sciences that refer to processes, events, and experiences that occur in the biographies of individuals. One particularly common mistake is for the concept of "life course" to be conflated with the concept of "life cycle," and this can engender the type of confusion of concern here. For example, Shanahan and Macmillan (2008, p. 40) use the following definition of the *life course*:

. . . the age-graded sequence of roles, opportunities, constraints, and events that shape the biography from birth to death.

Hogan (2000, p. 1623) uses a similar definition for *life* cycle:

. . . the socially defined, age-related sequence of stages individuals pass through beginning with birth and ending with death . . . (linking) individual aging, the organization of roles in society . . . and reproduction.

Almost everyone would agree that the concepts of *life course* and *life cycle* both refer to things happening to peoples' lives that may have lasting consequences, but this does not mean they refer to the same sets of processes. At the same time, many would distinguish between the two concepts

(e.g., Elder, 2000; Settersten & Mayer, 1997), but it is rare to find a clear articulation of the differences. It is therefore perhaps important to begin this discussion with a minimal understanding of these concepts through an appreciation of "life" itself and our understanding of basic concepts of "time" as they apply to human life. In so doing, in the course of this discussion, I attempt to clarify the differences between the two concepts, among several others.

Thought of in biological terms, *life* is all about *growth*, form, and generation. From a social perspective, there is much more to it. Indeed, in the social and behavioral sciences today, we have a host of concepts that are important for understanding human social behavior that are linked to ideas about life—I call them "life words"—concepts such as lifetime, life stage, life pathway, life trajectory, life span, life cycle, life events, life expectancy, life course, life history, life space, lifeworld, and lifestyles. Some of these concepts such as "life cycle" and "life expectancy"—have long and prodigious histories as conceptual tools within the life sciences. Others—such as the "life course"—are relatively new, emerging as a bona fide scientific concept only in the past several decades. At times, these words can be confusing, as many of them are interrelated, and all of them refer to distinct aspects of a common phenomenon—the study of human lives (see Table 1).

Life Span—From Birth to Death

Obviously, *life course* is not the same as *life span*. At the same time, there is considerable confusion regarding the differences because the two words are often used interchangeably. A common semantic error occurs when people use a phrasing like "over the life course" when they mean "over the life span." One would think that a simple concept such as "life span" would have a very precise meaning, but in fact, there is as much confusion here as anywhere else.

Researchers in the social versus biological sciences use the concept of life span in different ways, with some applying it to individuals and populations, and others to species (see Table 1). Applied to individuals, the concept of "life span refers to an individual's verified age at death" (Olshansky, Carnes, & Brody, 2002, p. 502). Life spans can range from minutes and days after a live birth to a large number of years. In demography, it is the measurement of individual life spans that permits the calculation of mortality rates and associated statistics. Life span potential is the theoretical maximum attainable age under optimal living conditions, but because such "optimal living conditions" can neither be specified nor realistically be maintained throughout the life span, this theoretical age can only be estimated (see Carey, 2003; Olshansky et al., 2002). At the population (or subclass) level, a variety of terms have been used to describe how long humans and other species can live or can expect to live—life expectancy is the actuarial approach to the latter (see Table 1).

Table 1. Glossary of Life Words

Life course: (a) A progression through time from birth to death (Clausen, 1986, p. 2); (b) those successive statuses individuals are called upon to occupy in various cultures and walks of life as a result of aging (Cain, 1964, p. 278); (c) events, transitions and trajectories extending across the life span, such as entering and leaving school, acquiring a full-time job, marriage, divorce, retirement, and the like (Elder, 2000, p. 1615); (d) an approach to the investigation of the changing environment of the individual and its developmental implications . . . through an evolving concept of age-graded life course that is embedded in a matrix of social relationships, an active view of the individual in shaping the life course, and an approach toward understanding historical influences in lives and developmental processes (Elder, 1997b, p. 968); and (e) a life course approach offers a way of linking early life factors to adult disease . . . throughout the (life span) exposures or insults gradually accumulate through episodes of illness adverse environmental conditions and behaviours increasing the risk of chronic disease and mortality (Kuh & Ben-Shlomo, 2004, p. 6).

Life cycle: (a) Biology: the continuous sequence of changes undergone by an organism from one primary form, as a gamete, to the development of the same form again; (b) a series of stages, as childhood and middle age, which characterize the course of existence of an individual, group, or culture; and (c) any similar series of stages: the life cycle of a manufactured product (Webster's, 1996).

Life events: Significant events occurring across the life span that mark transitions from one life cycle stage (or state) to another that are accompanied by changes in roles, expectations, responsibilities, and behaviors. These events are typically, but not always, age graded or age differentiated. Events signal transitions.

Life expectancy: The average number of years that a person of a given age may be expected to live. Life expectancy at birth is the most commonly presented value because this measures provides a succinct indicator of mortality that reflects mortality conditions across the age range and is unaffected by the age structure of the actual population and thus can be compared across populations (Crimmins, 2000, p. 1628).

Life history: (a) Biology: the series of living phenomena exhibited by an organism in the course of its development from inception to death (Webster's, 1996); (b) see life cycle (Webster's, 1996); (c) lifetime chronology of events and activities that typically combines data records on education, work life, family, residence, physical health, identities, and psychological well-being (Elder, 2000, p. 1616).

Life pathway: Trajectories of roles followed by individuals or groups through society (Elder et al., 2003, p. 8).

Life science: Any science that deals with living organisms, their life processes, and their interrelationships, as biology, medicine, or ecology (Webster's, 1996).

Life space (also psychological field or total situation): Social psychology: consists of the person and the environment viewed as one constellation of interdependent factors affecting behavior (Deutsch, 1968, pp. 423–427).

Life span: (a) The longest period over which the life of any organism or species may extend, according to the available biological knowledge concerning it; (b) the longevity of an individual; (Webster's, 1996); and (c) the temporal focus of inquiry (Elder, 2000).

Life span development: Multidimensional and multidirectional processes of growth involving both gains and losses, embedded in multilayered social and cultural contexts, involving dynamic processes of interaction of the developing organism with the social and physical environment (Featherman, 1983).

Life stage: A phase in a sequence of age-graded statues and/or roles.

Lifestyle: A diverse set of habits, attitudes, tastes, moral standards, economic level, etc., that together constitute individual differences in activities and orientations (Hankin, 2000, pp. 1639–1642).

Life support: Of or pertaining to anything that fosters or sustains life, success or continued existence (Webster's, 1996).

Life table (also mortality table). A statistical technique that provides a comprehensive description of the mortality level of a population. The life table incorporates age-specific rates of mortality and are unaffected by the particular age structure of the population. Knowledge of the age composition of the population (i.e., numbers of persons of exact ages) and the incident rates of deaths for persons of these ages permits the calculation of the average number of life remaining for persons of particular ages. See life expectancy (Crimmins, 2000, pp. 1629–1630).

Lifetime:

- 1. The time that the life of someone or something continues (Webster's, 1996).
- 2. For the duration of a person's life, for example, lifetime membership (Webster's, 1996).
- 3. The dimension of chronological age (Clausen, 1986, p. 2).

Life trajectory: Sequences of roles and experiences defined by transitions or changes in statuses or roles (Elder et al., 2003, p. 8).

Lifeworld: (from Phenomenology): (a) The shared common understandings, including values, that develop through face to face contacts over time in various social groups, from families to communities (Habermas, 1987, pp. 119–152); (b) social coordination or regulation occurs by means of shared beliefs and values; in the lifeworld, individuals draw from custom and cultural traditions to construct identities, negotiate situational definitions, coordinate action, and create social solidarity (Seidman, 1997, p. 197).

Demographers and biologists share an interest in the species-level biological limits on development, and the term "life span" is also used to refer to this. In this case, the concept of "life span" is used to refer to what is the natural

duration of the life of an evolved species. From here it can get rather more complicated, in that bio-demographers distinguish between a number of related concepts (see Carey, 2003; Olshansky et al., 2002). Maximum life span

is the longest life span ever recorded for a species. It is "the world longevity record for a species—a number that can only increase over time" (Olshansky et al., 2002, p. 502). Trends in the verified age of the oldest living person in a population subgroup over time have been the subject of considerable study (e.g., Wilmoth, 1998). *Oldest prevalent life span* is "the age of the oldest living person in any given year—a number that can rise and fall over time" (Olshansky et al., 2002, p. 502).

Aging and Human Development

From a biographical point of view, the concept of the *life* span—the length of life for an individual organism—draws attention to the biological limits on development and signals the temporal scope of inquiry (Elder, 2000). A *life-span* developmental perspective focuses on the processes and experiences occurring throughout the entire life span, from conception to death. What happens between conception and death is the focus of studies of human development in psychology, sociology, and related fields, and historically, the study of aging has been viewed as synonymous with the study of human development after some arbitrary point in the life span. The "life span developmental" perspective is a somewhat broader framework, as it considers aging to begin at the beginning. In Featherman's (1983, p. 2) words:

Developmental change occurs over the entire course of life; it is synonymous with aging in the broadest sense. Aging is not limited to any particular time of life; neither is development.

In this sense, aging simply refers to *changes to individuals* that occur over time, that is, within-person change (see Perlmutter, 1988) resulting from some combination of biological, psychological, and social mechanisms. This view of aging is at odds with the traditional view of aging among gerontologists, who define it as a time-dependent process characterized by irreversible changes that lead to progressive loss of functional capacity (Finch & Kirkwood, 2000, p. 6-8). Life-span perspectives, by contrast, conceptualize human development and aging as multidimensional and multidirectional processes of growth (or change) involving both gains and losses. Human development and/or aging are embedded in multiple contexts and are conceived in terms of dynamic processes in which the ontogeny of development interacts with the social environment, a set of interconnected social settings, embedded in a multilayered social and cultural context (see Bronfenbrenner, 1979). The uniqueness of individual biographies and the diversity of life patterns have encouraged a more radical approach to human development within the social sciences.

Human Development

At the simplest level, *development* is the act or process of developing. In its biological meaning, it refers specifically to *growth*, that is, the process of natural evolution from one

stage to another, as in the progression from an embryonic to an adult form. In biologically oriented discussions of development; thus, individual members of a given species follow a particular sequence of states or stages that result from natural processes of growth, differentiation, and maturation. Developmental biology is the branch of biology dealing with the processes of growth and change that transform an organism from a fertilized egg or asexual reproductive unit, as a spore or gemmule, to an adult. That biological development follows such an ontological course that interacts with environments seems incontrovertible. It is sometimes argued that developmental perspectives do not give enough credit to the role of the social environment (Elder, 1997b, p. 944). But there is always room for debate about what is natural and what is contributed by environment because they are irrevocably intertwined (see Dannefer, 1984a, 1984b; Featherman & Lerner, 1985).

The work of Darwin, Freud, Piaget, and others suggested that a number of different aspects of behavior follow a biological course, and developmental psychology became the branch of psychology that studies changes in human behavior from early life to death. Through the first half of the 20th century, the study of human development was primarily devoted to child development. The study of adolescent development came later, but it was not until the latter half of the 20th century that developmental scientists more seriously turned their attention to adult development and aging—hence, life span development (see Settersten, 2003). It was realized that the concepts and issues at stake with respect to children could not simply be extended to adults. New and difficult questions were raised about continuity and change in adult lives over time, about social settings that structure movement through these years, about connections between lives, time, and place, and how to handle these complexities in theory and research (Settersten, 2003). Within the past 30 years, the field of human development became aware of the importance of the "life-span developmental" perspective, which conceptualizes human development across the entire life span (Baltes, 1987, 1997; Baltes, Staudinger, & Lindenberger, 1999; Staudinger & Lindenberger, 2003). From this perspective, development is embedded in multiple contexts and is conceived of as a dynamic process in which the ontogeny of development interacts with the social environment, a set of interconnected social settings, embedded in a multilayered social and cultural context (Bronfenbrenner, 1979).

The work of Thornton (2005) is important to mention in this context. He argues against using concepts of *development*, stages of life, and transitions through stages of life and related concepts, which he refers to as "developmentalism." He offers a critique of this developmental paradigm, especially as it is applied to societies and in "modernization theory." The argument is that these things and their related elements of stages and transitions through stages are flawed and should not be used in social science research, and he

makes a general argument against the use of such developmental concepts at both the individual and macrolevels. The implication is that there is something seriously wrong with labeling people, societies, families, etc., as modern, developed, advanced, primitive, premodern, traditional, developing, etc. As he demonstrates, such a developmental paradigm can lead to serious errors of inference about observed patterns and processes (Thornton, 2005). Such arguments, although highly convincing when applied to societies, organizations, firms, etc., are unlikely to sway "life-span developmentalists" who study human development.

The Human Life Cycle

Despite the example given earlier of the conflation of these concepts, life course is not the same as life cycle. There are a number of misconceptions about the concept of life cycle, owing in part to the ways in which the concept has been applied to social organizations, such as families, firms, and even entire societies (see Thornton, 2005). The concept of "life cycle" has a very precise meaning in the biological sciences (see Table 1). In most animals, the life cycle seems obvious, with individuals developing from a fertilized egg through to adulthood through a succession of stages through processes of growth. The life cycle of humans—including the prolonged dependence on adults, generally monogamous and private pursuit of sex, concealed ovulation, and menopause among females—is what makes us distinctive from other mammals (Diamond, 1992). In the social sciences, the concept of "life cycle" refers not simply to biological characteristics and changes in the organism but also to the socially constructed, age-related sequence of stages individuals pass through beginning with birth and ending with death (Hogan, 2000). Historically "life cycle" refers to a fixed sequence of irreversible stages, tied specifically to sexual reproduction. An adult then produces gametes (sex cells) and fertilization of an egg begins the process over again with the development of a new individual (O'Rand & Krecker, 1990, p. 242). In recent discussions, old age is typically included as a postreproductive life stage, or what is now discussed as the third and fourth ages (see Laslett, 1989, 1995; Moen & Spencer, 2006).

The life cycle concept's emphasis on reproduction and generation within the framework of a population has retained considerable interest among demographers. Hogan (2000), one contemporary proponent of the utility of the life cycle concept, argues, for example, that the life cycle concept links individual aging, the organization of roles in society, reproduction, and through the notion of age-succession (cohort replacement) societal innovation and change. Underlying the sociological conception of life cycle is the recognition that humans are biological organisms that are born, mature, and die. As with other biological organisms, reproduction is a key feature of human maturation, ensuring the persistence of the species (Hogan, 2000, p. 1623), but as

Hogan (2000) points out, there is an important element of social construction that is ignored by biological perspectives.

There seems to be a variety of opinion on the value of the life cycle concept, and the distinctiveness of the concept of "life cycle" has all but been lost in the social and behavioral sciences. As O'Rand and Krecker (1990, p. 248) note "the terms aging and life cycle have often been treated as synonymous" in the field of individual aging research. The principle model of *life cycle* that predominated at the end of the 19th century "referred to the unilinear series of changes (transformations) in form undergone by organisms in their development over time from early stages to equivalent stages in the succeeding generation." The irreducible properties of the life cycle, therefore, were successive forms (stages), irreversible development (maturation), and the reproduction of form (generation). These elements of the life cycle defined the linkage between time and variation over the life span.

In the 1940s, Glick (1947, 1967) introduced the idea of a "family life cycle," suggesting that families progress through a sequence of stages, from courtship to the death of one's spouse (see also Duvall, 1977; Hill, 1970). This concept has been roundly criticized, especially by those who introduced the life course concept into the social and behavioral sciences (Bryman, Bytheway, Allatt & Keil, 1987), but despite this alternative theorizing about family-related life events, the concept of *family life cycle* appears to be alive and well in some sectors of demographic research. Faust (2004, p. 208), for example, suggests that "the life cycle of the family can be quite important when studying the demography of families and households."

In stark contrast, for many developmental scientists the term "life cycle" is problematic, partly because there is more to the human life cycle than biological development. Furthermore, the theories of the "family life cycle" adapted these ideas, construing family life as a fixed sequence of discrete states: "courtship, engagement, marriage, birth of the first child, birth of the last child, children's transition in school, departure of the eldest and youngest child from the home, and marital dissolution through the death of one spouse" (Elder, 1997b, p. 945). These models seem too deterministic and leave little or no room for deviation. Sociologists have adopted in their place the more sophisticated and flexible life course perspective. As Settersten (2003, p. 16) notes, these family life cycle models are "largely inappropriate in contemporary times: marriage and parenting are often independent of one another; family size has shrunk; a period of cohabitation may occur before marriage; nontraditional family forms are prevalent, divorce occurs in record numbers, children return to the nest, and the joint survival time of spouses has lengthened."

In such situations, the life cycle concept seems to be a far less useful analytic device. Indeed, few developmental scientists today value models proposed as fixed and universal. These models ignore ways in which lives are self-regulated and variable. In addition, models that explicitly tie human development to reproduction cannot be applied to individuals who do not, or cannot, parent, and yet, anyone who denies the power of the life cycle has not experienced (or does not remember) puberty. Still, demography is concerned with reproduction, and demographers by and large prefer the term "life cycle" when referring to biographical time (e.g., Crimmins, 2005). How do we incorporate the biological dimension of life cycle into life course models? This is one of the outstanding challenges to researchers recognizing both the importance of the traditional concept of life cycle from biology (without its evaluative aspects) and the more recent concept of life course. Hogan (2000) sees the advantages of the life course perspective, but believes holding on to the life cycle as a distinct concept has clear advantages, and I agree (see also Kaplan, Hill, Lancaster, & Hurtado, 2000; Lee, 2003; Modigliani, 1976; Modigliani & Brumberg, 1990).

THE LIFE COURSE

This essay was provoked by the recognition that the concept of *life course* is used quite differently across various disciplines and even within the same discipline. Given the multidisciplinary (and possibly interdisciplinary) initiatives in the study of aging and human development (see Settersten, 2003, 2006), it becomes a matter of some urgency to promote greater common understanding of different perspectives and to find a basis for synthesis and integration (see Mayer, 2003). As I mentioned earlier, the term "life course" is so new, however, that it has not yet found a place in dictionaries of the English language, but because it is taken by many to supplant many of the earlier conceptual tools, such as "life cycle" or "life span," it is essential to arrive at greater clarity of its status as a scientific concept and to distinguish it from other established concepts (see Elder, 2000, p. 1615).

The Evolution of the Life Course Concept

It can be argued that the theoretical underpinnings of the life course perspective have been around for some time. Many people have observed that Thomas and Znaniecki (1927) pioneered in the use of *life histories* to investigate social processes involving the interaction of the individual and society (see Elder et al., 2003, p. 3; Featherman, 1983, p. 10; Maines, 2000) and that Mills' (1959) challenge to sociologists to focus on the intersection of biography and history in social structure, an orientation for which he coined the term "sociological imagination," did much to promote the study of the life course (see Alwin, 1995; Alwin, Cohen, & Newcomb, 1991).

Life Course as Time or Age

Perhaps the most common use of the term *life course* is as "a progression through time" (Clausen, 1986, p. 2). I have repeatedly encountered the phrase "over the life course" in

both demographic and developmental research in which the term is used as shorthand to refer to whatever in a general sense might happen to people in biographical time. As Clausen (1986, p. 2) observes: "Aging or life time is the most obvious dimension in the study of the life course" and the treatment of the life course follows "the individual chronologically, from birth [conception] to death." Uses of the concept of "life course" as time or age, as in "over the life course" or "life course patterns," could as readily substitute the word "time" for "life course" in such phrasings, as in "over time," and "age-related patterns of change." The concept of "life course as time" or "life course as age" does not bring anything new to the conceptual table, in that it is reducible to other more fundamental concepts.

Life Course as Life Cycle Stages

The earliest uses of the concept of *life course* applied the idea of life cycle stages. The first actual use I can find of the term of "life course" in the modern era was in a chapter titled "Life Course and Social Structure" by Leonard Cain (1964) in an early Handbook of Sociology edited by R.E.L. Faris. (The author acknowledges Glen H. Elder, Jr., and Richard A. Settersten, Jr., for drawing this to his attention.) Cain (1964, p. 278) uses the term "life course to refer primarily to those successive statuses individuals are called upon to occupy in various cultures and walks of life as a result of aging "This view was reinforced by Riley and her colleagues's writings on age differentiation and age stratification (Riley, 1987; Riley, Johnson, & Foner, 1972). Here again this concept of *life course* does not bring anything new to our conceptual apparatus—it is reducible to our understanding of "life cycle," as defined previously.

Life Course as Events, Transitions, and Trajectories

One of the predominant meanings of the term *life course* refers to events, transitions, and trajectories. Harris (1987, p. 21–22) argues that the study of the life course is the "study of a sequence of events, that is to say, a process which is both unintended and the result of intentionality in which earlier events condition later events." He notes that events occurring in both the historical time and biographical time reflect processes that can be construed as event sequences. This definition of life course is strikingly close to Elder's (1985) use of the concept of "life trajectories" (see glossary in Table 1) to define what he meant by life course: "Life trajectories can be charted by linking states across successive years . . . each trajectory is marked by a sequence of life events and transitions, changes in state that are more or less abrupt" (Elder, 1985, p. 31–32). Elder (1985, p. 32) importantly distinguished between the concept of life course and the concept of life cycle, but linked the two:

Life course dynamics arise in part from the interplay of trajectories and transitions, an interdependence played out over time and in relation to others. Interdependence emerges

from the socially differentiated life course of individuals, its multiple trajectories and their synchronization. . . . Interdependence refers to the interlocking nature of trajectories and transitions, within and across life stages [emphasis added]. (Elder, 1985, p. 32)

In Elder's early writings on this subject, the concept of life course is defined by trajectories of events and transitions, for example, role sequences, which extend across the life span. Each life course transition is embedded in a trajectory that gives it specific form and meaning (Elder, 2000; Elder & Johnson, 2003; Elder et al., 2003). Defined in this manner, the life course perspective has become a mainstay for demographers (Dykstra & van Wissen, 1999; Rindfuss, 1991). Indeed, Willekens (1999, p. 23) observed that "most events that occur between birth and death and that have a notable impact on a person's life are *demographic* [emphasis added]." He went on to list the following: "Leaving the parental home, marriage, marriage dissolution by divorce or widowhood, migration, labor force entry and exit" as the most important life events, and of course, by implication, these are the province of demographers (Willekens, 1999, p. 23). Demographers have contributed to the study of the life course through (a) the substantive focus of demography of the life course (e.g., Rindfuss, 1991; van Wissen & Dykstra, 1999), (b) the measurement of life histories as an approach to the study of the life course (e.g., Belli, Stafford, & Alwin, 2009; Freedman, Thornton, Camburn, Alwin, & Young-DeMarco, 1988), and (c) the statistical analysis of the life course using demographic statistical tools, such as event history models, event-centered growth modeling strategies, and latent class models of life pathways (e.g., Alwin & Campbell, 2001; Alwin, Hofer, & McCammon, 2006; Macmillan & Eliason, 2003; Teachman, 1983).

Life Course as Human Development

In an early essay on "Age Differentiation and the Life Course," Elder (1975, p. 186) recognized the "growing acceptance of a life-span framework in studies of human development, socialization and role of status sequences..." He observed (1975, p. 167) that "the life span perspective views human development, socialization, and adaptations as lifelong processes..." He identified the "social timetable of the life course (e.g., entry into marriage, retirement), which is defined by age criteria in norms and social roles" as a distinct set of considerations (Elder, 1975, p. 165). Consistent with the view of life course as "events, transitions and trajectories," Elder (1975) argued that the sociological literature on age was a useful adjunct to the life-span perspective on human development (see also Elder, 1985, 2000).

In these early writings, Elder (1975) maintained a distinction between the "life-span perspective" and the "life course" approach. The life course approach, according to Elder (1975) not only emphasized the sequence of roles that embodied the phenomenon of age differentiation, it also

targeted the historical location of birth cohorts as an important index of differences in life-span development and their potential role in social change (Mannheim, 1927/1952; Ryder, 1965). In his early writings, there was never any intention to "replace" the life-span developmental perspective with the life course orientation. Elder's (1975) conceptual framework, which drew a distinction between life-span development and the content of the life course (as defined by events, transitions and trajectories), was reinforced in Featherman's (1983) essay on life-span perspectives in the social sciences in which he included the life course as embedded in the larger perspective of life-span development (see pp. 8–9, 21, 24, 34–39).

By contrast, beginning in the 1990s, Elder and his colleagues began to view the life course perspective as a theoretical orientation for the study of individual lives, human development, and aging. Elder (1997b, p. 968) offered the following statement on the life course perspective:

Life course theory offers . . . a fruitful way to think about and investigate the changing environment of the individual and its developmental implications . . . through an evolving concept of age-graded life course that is embedded in a matrix of social relationships, an active view of the individual in shaping the life course, and an approach toward understanding historical influences in lives and developmental processes"

Elder (2000, pp. 1615–1617) argues that beginning in the 1960s this theoretical orientation has diffused across substantive domains and disciplinary boundaries in the social and behavioral sciences. It has built "conceptual bridges" between developmental processes, the life course, and social change. Elder has pioneered in establishing the "life course as life span development" meaning of "life course" and promoted the "theory of the life course" (see especially Elder, 1997a, 1999).

The recent writings of Elder and his colleagues (e.g., Elder & Johnson, 2003; Elder & O'Rand, 1996; Elder & Shanahan, 2006; Elder et al., 2003) have emphasized several paradigmatic principles that characterize the life course approach, as follows: (a) the principle of life-span development, that is, human development and aging are lifelong processes; (b) the principle of agency—individuals construct their own lives through the choices and actions they take within social structures (i.e., the opportunities and constraints of social arrangements) and historical circumstances; (c) the principle of time and place—the lives of people are embedded and shaped by the historical times and places they experience over time; (d) the principle of timing—the developmental consequences of events and transitions are conditional on their timing in people's lives; and (e) the principle of linked lives—people's lives are lived interdependently and sociohistorical influences are expressed through networks of shared relationships (see Elder et al., 2003, pp. 10-14; Shanahan & Macmillan, 2008).

Life Course as Early Life Influences on Later Adult Outcomes

In the field of epidemiology, there has been a recent emphasis referred to as a "broad life course approach," which challenges the prevailing etiological model for adult chronic disease that emphasizes adult risk factors and instead draws attention to the experiences that occur at earlier stages of the life span, especially fetal development and childhood, that may contribute to the development of chronic disease and other aspects of adult health (see Kuh & Ben-Shlomo, 2004; Kuh, Power, Blane, & Bartley 2004; Kuh & The New Dynamics of Ageing Preparatory Network, 2007). This *fifth* view of the life course can perhaps be seen simply as an instantiation of the "life course as human development" perspective reviewed earlier, but it is distinct in its emphasis on the importance of early influences and the accumulation of effects. In the words of Kuh and Ben-Shlomo (2004, p. 6):

The life course approach offers an alternative way of linking early life factors to adult disease. It suggests that throughout the [life span] exposures or insults gradually accumulate through episodes of illness, adverse environmental conditions and behaviours increasing the risk of chronic disease and mortality. Accumulation of risk is different from programming in that it does not require (nor does it preclude) the notion of critical period.

This renewed interest in the effects of early life resources on later life health outcomes has been reinforced and enriched by the emerging life course perspective in other fields, for example, psychology, sociology, and demography, which focuses on developmental trajectories and articulates the ways in which early life events and experiences shape individual differences in outcomes measured in adulthood. With respect to the influences of early social factors, while few would disagree that stimulating and nurturing environments are essential to optimal child development, there is no consensus about the resilience of children to adversity and the long-term consequences of certain childhood experiences. On the one hand, some have argued that early experiences in the family do not inexorably shape people's lives; rather, humans have a lifelong capacity for change and early childhood experiences are continually transformed by later events and experiences or mediated by experiences outside the family (Harris, 1995, 1998; Kagan, 1984; Pinker, 2002). On the other hand, a vast array of recent research has argued that a number of early life experiences are critical for future life chances and that the consequences of certain individual differences in childhood experiences reach well into adulthood. A wide-ranging literature appears to demonstrate the far-reaching consequences of the experience of marital dissolution or divorce (Amato, 1999a, 2001; Amato & Keith, 1991a, 1991b, 1991c; Demo & Acock, 1988; Seltzer, 1994), the experience of father absence (Amato, 1999b), the effects of early socioeconomic disadvantages (Alwin & Thornton, 1984; Blau & Duncan, 1967; Sewell & Hauser, 1975), the experience of maternal employment (Parcel & Menaghan, 1994), the differential effects of family size (Blake, 1989; Kuo & Hauser, 1997) and birth order (Alwin, 1991; Conley, 2004; Zajonc, 1976), the nature of the transition to first grade (Entwiste, Alexander, & Olson, 2003), individual differences in childhood health (Blackwell, Hayward, & Crimmins, 2001; Elo & Preston, 1992), and early differences in intellectual ability (e.g., Deary, Whiteman, Starr, Whalley, & Fox, 2004; Kuh, Richards, Hardy, Butterworth, & Wadsworth, 2004).

Many authors, thus, use the language of the "life course" to refer to this "long view" of human development and the accumulation of influences. These notions are also consistent with one of the timeworn hypotheses in the literature on social stratification, but one that is not often tested empirically, which is that the consequences of early socioeconomic differences in the lives of individuals are accentuated over time. Using the metaphor of the parable of the talents, which he dubbed the "Matthew effect," Merton's (1968) famous paper in Science about inequalities in the reward systems governing credit in scientific authorship quoted the following Biblical passage: "unto everyone that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath." In short, Merton suggested that "the rich get richer and the poor get poorer" or cumulative advantage and disadvantage.

Few would on the face of it doubt Merton's observation that the social environment is structured in such a way as to promote the accrual of greater resources to those who already have them—or cumulative advantage—and the withholding of resources from those who begin with lessor cumulative disadvantage. The argument is typically extended further to suggest there is a further compounding, or an accentuation, of the influences of the social environment over time, but this has not been closely examined. Not only do socioenvironmental inequalities affect individual differences at multiple time points over the life span, there is considerable theory, suggesting that the residues of these influences in individual differences cumulate over time. Hence, there is a literature that has developed under the topic of "cumulative advantage/disadvantage theory" (Dannefer, 1987, 1988a, 1988b, 2003; O'Rand, 1996; O'Rand & Hamil-Luker, 2005), which fits well within this particular view of the life course.

INTEGRATING PERSPECTIVES

I dismiss those uses of the term "life course" that confuse it with other more fundamental concepts, such as "age," "time," "life span," or "life cycle." Authors should be discouraged from using the term "life course" in constructions where these other concepts are more appropriate. One of the most common abuses of this principle occurs when the phrase "over the life course" is used, when the meaning the author wishes to convey is in fact something like "over time," "over the life span," "over lives," or "age related."

Table 2. Convergences in Life Principles

1. Principle of lifelong development.

Featherman: Developmental change occurs over the entire course of life; it is synonymous with aging in the broadest sense (1983, p. 2).

Elder: Life-span development results from a life-long adaptive process. Some processes are cumulative and continuous, others are discontinuous and innovative, showing little connection to prior events or processes (1997b, p. 943).

2. Principle of life events or life histories.

Featherman: Developmental changes in the course of aging reflect biological, social, psychological, physical, and historical events; the multiple determinants . . . express their influences interactively and cumulatively, defining life-event or life-history trajectories (1983, p. 3).

Elder: Social pathways, the individual life course, and developmental patterns refer to processes that are structured by age norms and other constraints, biological and social. Trajectories . . . (link) social or psychological states over a substantial part of the life span. Transitions depict . . . (changes) in state or states, such as when children leave home . . . (1997b, p. 955).

3. Principle of human agency.

Featherman: Individuals are agents in their own development. Life histories are transactional products of the dialectics among the multiple determinants of development and the motivated, selectively responding person. Generalizations across persons about constancies in human development . . . are few and difficult to formulate (1983, p. 3).

Elder: Individuals construct their own life course through the choices and actions they take within the constraints and opportunities of history and social circumstances (1997b, p. 961). . . . People bring a life history of personal experiences and dispositions to each transition, interpret the new circumstances in terms of this history, and work out lines of adaptation that can fundamentally alter their life course (1997b, p. 957).

4. Principle of cohort variation in development.

Featherman: Each new birth cohort potentially ages through a different trajectory of life events, brought about by the impress of sociohistorical change and by individual reactions to it. Historically constant generalizations about developmental changes in aging are fewer or greater as a function of the pace and direction of sociohistorical change (1983, p. 3).

Elder: Birth year or date of entry into a system . . . locates the individual according to historical time and related social changes . . . Adjacent birth cohorts are most sharply differentiated in the course of rapid change, and represent a vehicle of social change to the extent that cohort differences arise . . . the impact of the (historical) event is contingent on the life stage of the cohort at the point of change (1997b, p. 948).

5. Principle of behavioral individuality.

Featherman: Behavior and personality apparently remain more malleable throughout the full course of life than becomes apparent in common contemporary social and subcultural settings. The apparent plasticity of manifest patterns of development . . . suggests a rethinking of research paradigms and social policies . . . predicated on . . . static models of universal stages of development (1983, p. 3).

Elder: People bring a life history of personal experiences and dispositions to each transition, interpret the new circumstances in terms of this history and work out lines of adaptation that can fundamentally alter their life course. This is, individual differences interact with each new transition experience to influence behavioral responses and accommodations. Behavioral novelties can arise at this point (1997b, p. 957).

6. Principle of age-graded or normative features of development.

Featherman: . . . lifelong aging reflects sequences of social positions, or trajectories of social roles and associated statuses and perquisites that have age-related features . . . social positions carry a burden of custom and rules that prescribe behavior . . . these prescriptions mold and reformulate behavior and personality as the person learns to perform and moves through sequences of positions (1983, p. 9).

Elder: An individual's life pattern is structured by multiple role sequences and their transitions. These transitions into and out of social roles across the life span entail changes in status and identity, social and personal. Changes in major life roles . . . generally represent changes in social stage across the life cycle (1997b, p. 944).

I hope that one salutary effect of this essay is to encourage greater precision and clarity in the uses of these terms. Beyond these confusions of terminology, there remain three fundamentally distinct life course perspectives that are discussed earlier—life course as "human life span development," life course as "events, transitions, and trajectories," and life course as "as early life influences on later adult outcomes."

I find a great deal of similarity between the "life course as human development" approach as defined earlier and the "life-span developmental perspective" articulated by Featherman (1983), so much so that I compared and contrasted the main themes in Elder's (1997b) chapter "The Life Course and Human Development" (see also Elder & Shanahan's [2006] chapter with the same title) with Featherman's (1983) "Life-Span Perspective in Social Science Research" (see Table 2). I concluded that there is very little difference between the key themes in the two approaches, which leads me to conclude that contemporary

writings about the life course perspective (e.g., Elder, 1997b) are only marginally different from the life-span perspective articulated in the work of Featherman (1983). There are some differences, however: (a) life-span emphasis on resources for adapting to event experiences and life course emphasis on timing of events; (b) life-span emphasis on individual and life course emphasis on the linkages of individuals, for example, Elder's notion of "linked lives" (see Elder et al., 2003); (c) life-span emphasis on ontogenesis and life course emphasis on sociogenesis (see Dannefer, 1984b); and (d) life-span emphasis on "openness" or "plasticity" of development and life course emphasis on the constraints imposed by prior events and experiences. All in all, however, I find more similarities than differences between the life-span developmental perspective and Elder's recent writings about the life course perspective. Elder's (1997a, 1997b, 1999; Elder & Shanahan, 2006) "life course as human development" use of the concept of life course

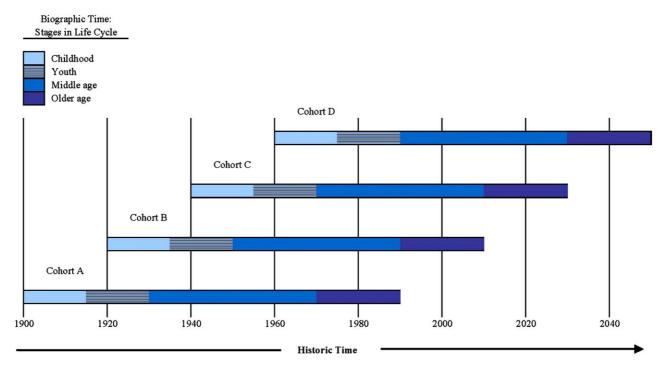


Figure 1. Intersection of biographic and historic time within the age stratification/life course framework.

appropriates substantial content from the life-span developmental perspective, much more so than in his early writings (e.g., Elder, 1975, 1985).

As noted earlier, Featherman (1983, p. 2) described the "life-span perspective" on human development and behavior, which posits that "developmental changes in human behavior occur from conception to death, and arise from a matrix of biological, psychological, social, historical, and evolutionary influences and from their timing across the lives of individuals." In his discussion of the *life-span developmental perspective*, Featherman (1983) used the term "life course" sparingly, suggesting that it was embedded in the larger perspective of life-span development. This view is consistent with the demographic perspective on the life course reviewed earlier, and it is worthwhile to return to this perspective as a way of integrating this *life course perspective* within what might be considered the broader life-span developmental perspective.

The framework I propose involves a set of "premises"—inspired by Featherman (1983) and Elder (1997a) and reinforced by the "age stratification paradigm" of Riley and her colleagues (see Riley, 1973, 1979, Riley et al., 1972)—drawing upon the essential elements discussed earlier. These premises are as follows: (a) the fundamental reality of the intersection of biographical and historical time in the sense of Mills (1959) and others (i.e., the existence of unique cohorts of individuals), and the influence of this unique status on outcomes of interest; (b) the focus on within-person change in biographical time, this is called by a variety of names—aging, human development, maturation,

gains/losses—but the essential feature is that of analysis of within-person change and what influences its direction and its rate, and how these might differ by birth cohort and other factors; (c) the distinction between life stages (governed by both biological and social mechanisms) and life course events and transitions, and hence, the recognition of the usefulness of the concept of life cycle (as defined by Hogan [2000]); (d) the fundamental reality of *life course events*, transitions, and trajectories, in the sense of Elder (1985), and as defined with reference to the social pathways taken by lives, that is to say, processes shaped by events and experiences, both unintended and the result of intentionality, which produce outcomes of interest; and (e) the realization of the interconnection of *life cycle stages* (e.g., infancy, childhood, adolescence, adulthood, etc.), over the life span, and even though they can be studied separately, what happens to a person at one prior stage, for example, early life events and experiences, can (and does) affect outcomes at a later stage, that is, earlier events/experiences condition later events/experiences. There are a number of propositions or principles that can be derived from these premises, but I cannot go into these here (see Table 2; see, e.g., Elder & Johnson, 2003; Elder & O'Rand, 1996; Elder & Shanahan, 2006; Elder et al., 2003; Kuh & Ben-Shlomo, 2004; Kuh & The New Dynamics of Ageing Preparatory Network, 2007).

Following Riley (1973), the conceptual distinctions relevant to the earlier discussion can be illustrated with reference to Figure 1, where I depict the relationship between biographic and historic time in four hypothetical cohorts (see Alwin, 1995; Alwin, McCammon, & Hofer, 2006;

Alwin & Wray, 2005; Riley, 1973). Because of its critical role in understanding population composition and change, demographic life course researchers have pioneered in the use of the concept of birth cohort (Alwin & McCammon, 2007; Hareven, 1982; Kertzer, 1983; Modell, 1989; Ryder, 1965). In general, a *cohort* is a group of people who have shared some critical experience during the same interval of time. Defined in this way, knowing a person's cohort membership may be thought to index the unique historical period in which a group's common experiences are embedded (Uhlenberg, 1988). Members of a birth cohort share a social history—historical events and the opportunities and constraints posed by society at a given time. Further, members of a birth cohort share the experience of the life cycle at the same time, that is, they experience childhood, reach adolescence, grow into early adulthood, and mature into midlife and old age at the period in history. And finally, members of a birth cohort share the experience of the cohort itself, for example, its size or its level of education, are something unique to the cohort (Easterlin, 1987). Moreover, distinguishing between the historical locations of different people, this framework permits "within-cohort" analysis (e.g., see Alwin, Hofer, & McCammon, 2006; Dannefer & Uhlenberg, 1999).

The essential ingredients of this framework, then, involves the integration of the *third* and *fourth* conceptions of the life course—the demographic and developmental perspectives on the life course (see Alwin, 2009; Alwin & Wray, 2005; Alwin, Hofer, & McCammon, 2006; Alwin, McCammon, & Hofer, 2006, Alwin, McCammon, Wray, & Rodgers, 2008)—as well as the *fifth* perspective on the life course, which emphasizes the effects of events and experiences at earlier stages on outcomes at later ones. Methodologically, the productive use of this framework requires the collection of longitudinal data and the measurement of life histories over substantial periods of time (e.g., see Mayer, 2009). With repeated measures on the same cohorts over time, in other words, what is now called the "accelerated longitudinal design" (see Alwin, 2009), this permits the use of growth modeling and other statistical tools, such as event history models (e.g., Teachman, 1983), and latent class models of life pathways (e.g., Macmillan & Eliason, 2003).

The Age Stratification-Life Course Framework

To summarize, this integrated framework embodies all the premises set forth above. It is motivated to respond to the need for synthesis and integration. Rather than accept the confusing state of affairs with regard to the use of various conceptions of events and experiences occurring in biographical time, it is important for present purposes that we distinguish among several concepts—the life span, life cycle, and the life course in understanding the nature of human lives—I refer to it as the "Age Stratification—Life Course Framework" which integrates all the previously

discussed concepts. From a biographical point of view, the demographic concept of the *life span*—the length of life for an individual organism—draws attention to the biological limits on development. It also signals the temporal scope of inquiry, and a life-span developmental perspective focuses, therefore, on the effects of events and processes (both ontogenic and sociogenic) occurring throughout the entire life span or some major portion of it. Many people like to refer to these "portions" as "stages" or "phases," such as childhood, adolescence, early adulthood, midlife, the third age, and old age.

As noted earlier, such a life-span developmental perspective emphasizes how the age-graded ontogeny of human development interacts with the social environment (Baltes, 1987, 1997; Baltes et al., 1999; Featherman, 1983). Historically, life cycle refers to biological "maturational and generational processes driven by mechanisms of reproduction in natural populations" (O'Rand & Krecker, 1990, p. 242). It refers to a fixed sequence of irreversible stages, tied specifically to sexual reproduction. The irreducible properties of the life cycle, therefore, are successive forms (stages), irreversible development (maturation), and the reproduction of form (generation). These elements of the life cycle define the biological bases of changes over time and variation over the life span in the social constructions we refer to as "life stages" (Hogan, 2000; O'Rand & Krecker, 1990). One important implication of the above is that (with reference to Figure 1) there may be interactions between cohorts and developmental stages (Elder, 1980) or developmental processes (Baltes, Cornelius, & Nesselroade, 1979), but the key element is that the life cycle is "age graded," that is, experience is organized differently depending upon the biological and socially defined status of the person.

As I have argued here, the concept of life course is often misunderstood, in that it is often used as a synonym for "life cycle" or "life span," but it refers to something quite different. Each phase of the life span has a set of potential life course patterns, that is, differences in social pathways for negotiating a particular life stage and transitions between life stages. In this regard, the demographic conception of the life course, which refers to the structure, sequence, and dynamics of events, transitions, and trajectories (pathways) that take place across life cycle stages or phases of the life span has proven to be the most useful for research. If one takes one particular life cycle phase or stage, for example, the period of "youth," as set off in Figure 1 with hash marks, it can be shown that the life course approach is quite useful from the point of view of charting the social pathways that matter for given outcomes of interest. Given our culture and its history, youth involves a life stage that is relatively dense with respect to the occurrence and frequency of life events (Rindfuss, 1991). It is also considered a particularly impressionable period for the formation of beliefs and orientations upon which historical events are thought to have a strong impact (Alwin et al., 1991; Erikson, 1988). Thus,

for example, school and work transitions in adolescence are core elements of a set of trajectories that define a variety of different social pathways during a particular life cycle stage (see Hogan & Astone, 1986; Macmillan & Eliason, 2003; Rindfuss, 1991; Shanahan, 2000).

Youth is just one example of a life cycle stage where life course events and transitions have been studied. Similarly, in old age, transitions involving work, retirement, marriage/family, and health define the relevant trajectories of social lives (Ferraro, 2001). Each life course transition is embedded in a trajectory that gives it specific form and meaning within a specific phase of the life cycle, for example, childhood, adolescence, young adulthood, midlife, or old age. An elaboration of how the demographic approach to the life cycle is beyond the scope of the present discussion, although examples have been mentioned in the discussion of relevant literatures in the foregoing. Time does not permit the development of a life course approach to transitions to retirement and old age.

CONCLUSIONS

This essay was stimulated by the fact that in the social and behavioral sciences, the "life course perspective" has become one of the dominant programs for the study of human development and aging. It has also become a "catch all" term, taken to refer to all manner of different aspects of individual experiences in biographical time. In this essay, I echo Elder's (2000, p. 1615) observation that "a number of concepts have been applied interchangeably to lives (life course, life cycle, life history, and life span), but each makes a distinctive contribution that deserves notice in mapping this domain." My research revealed five "different" uses of the term life course: (a) life course as time or age, (b) life course as life stages, (c) life course as events, transitions, and trajectories, (d) life course as life-span human development, and (e) life course as early life influences on later adult outcomes. The content referred to in each case can be formulated within a general developmental framework, which I call the age stratification-life course framework that includes historical and biographical time, incorporating within-person change (i.e., human development and/or aging), life cycle stages, and life course events, transitions, and trajectories across the entire life span. The concept of "life course" therefore supplements rather than supplants the concepts of "life span" and "life cycle." It is hoped that this conceptual integration of concepts both helps promote a greater degree of clarity in the use of these concepts and its potential to illuminate the nature of human lives and processes of individual and social change.

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Correspondence

Correspondence should be addressed to Duane F. Alwin, PhD, Department of Sociology and Center for Life Course and Longitudinal Studies, University Park, Pennsylvania State University, PA 16802. E-mail: dfa2@psu.edu.

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