

Commons, M. L. (1999). Threads Of Adult Development. *Adult Developments: The Bulletin of the Society for Research in Adult Development*. February 1999 (Vol. 8, No. 1)

Threads Of Adult Development

by Michael Lamport Commons

This review conceptually analyses the multidimensional threads of adult development. Here, threads, the sequence of events in a life's unspoken narrative, run throughout the whole course of adult lives. These threads are like successive parts of a hypercomplex lattice. Each thread can be represented by a series of points along a conceptual variable. Such variables include content—the direction of adult development and its subvariables— as well as process—the manner studied and its subvariables. These variables are often complex, more like systems than single variables. Examples of some of these variables and subvariables are given below. Each study of adult development can be considered to be embedded in one or more of these threads, and it possibly contributes to the accumulation of knowledge in this field. This brief review will discuss the dimensions along which the contemporary study of adult development is conceptualized and studied.

The Direction of Development

The four major forms of adult development are positive adult development, directionless change, stasis, and decline. The first of the four forms, positive adult developmental processes, is divided into at least six parts: hierarchical complexity (orders, stages), knowledge, experience, expertise, wisdom, and spirituality. Change, the second of the forms, is divided into periods, usually defined by decades and seasons, that concern the themes in the life course. Stasis, the third form, shows there is no change between something measured at two ages. Decline, the fourth form, is divided into at least six parts—namely, retrieval memory, memory speed, horizontal complexity (bits), strength, agility, and health.

Nondevelopmental forms include adulthood and adult human behavior. Sometimes, papers discuss adulthood, mention it in the topic words, and have adult participants. However, the measurements of adult behavior are made only once within some small age range. Hence, there is no possibility of determining whether there is development or not. Such studies can be considered to be a nondevelopmental form, as distinct from the four major developmental forms.

The Manner Studied

All four of the above possible forms of development—positive adult development, directionless change, stasis, and decline—are studied in different ways. I use three broad classifications for the acquisition of knowledge and the verification of truth in general. Here, the first and third types of claims of truth are not considered final or immutable, but hopefully progressive, where inquiry moves from paradigmatic knowledge to improved paradigmatic knowledge—e.g. Einstein's improvement of Newton's model (third type below) or Riemann's extension of Euclid's model (first type below).

The first kind of truth is analytic truth, which has no independent observations. It consists of a constructed system based on axioms. The kind of works that fall into this category are philosophical, logical, and mathematical ones, including computer simulations. The second kind of truth is experiential truth, which has one independent observation although multiple participants may report the same experience. Examples of this are fiction, music, movies, and religion.

The third classification for the verification of truth is empirical truth, which requires two independent paths for the observation of the same events. Empirical truth may be further broken down into four paradigms. The first consists of chaotic, inconsistent historical paradigms. These might be whole-life studies, clinical studies, descriptive studies from various perspectives, or evaluations of proclivities, performances, or attitude. A second methodological paradigm consists of three possibilities. These are interviews, both structured and unstructured; questionnaires; and tests of many different forms—including profile-generating tests of personality, interests, abnormality, and skill on one hand, and single-scale tests of strength, impairment, acuity, sensitivity, and development on the other. The third and fourth methodological paradigms are simply quasi-experiments and true experiments.

Many of these means for studying adults may be carried out cross-sectionally or longitudinally, and these methods may even be combined. Most studies are cross-sectional, in which some feature of participants who vary in age and education is measured. However, the participants are studied only once. In contrast, longitudinal studies measure

some feature of the same participants from the same cohort at least twice. Some studies even measure multiple cohorts a dozen times. The longitudinal design makes it much easier to control for apparent change in participant performance that is really due to differences in the characteristics of participants from different sample groups. For example, the political party affiliation of 20-year-olds might be different from the party affiliation of 60-year-olds. However, there may be no developmental change. The 60-year-olds may have maintained the present affiliation since they were in their 20's as opposed to having changed their affiliation as they aged. Whereas longitudinal studies measure variation over time, cross-sectional studies make it possible to look at variation within a sample at a single time-point of measurement. The best studies combine both longitudinal and cross-sectional techniques.

There are varying degrees of agreement about the many claims that have been set forth concerning the value and dangers of experimental interventions—that is, programmed experiments versus natural ones. If there were no possible harms or excessive costs, every scientific investigator prefers true experimental interventions, in which the conditions are systematically varied and include control groups. Investigators also generally support the true experiment where one of the interventions may be beneficial, as in testing for positive effects of drugs.

But nature and circumstance do not always offer possible benefits. Sometimes, life provides interventions that are suspected to produce harmful effects. For moral reasons, we generally will not assign participants to potentially harmful conditions that promise no benefits. Yet, this means that there are many questions about whether or not the suspected harms are truly the cause of the problems we later see—at least until nature provides a valid "natural experiment" or until some investigator comes up with a clever design to tease out the possible answer.

Arguments are often made for not evaluating efficacy claims for mental health and educational services of various kinds. Interventions in both education and in therapy tend to be complex and multidimensional. To run a true experiment, something has to be done with one group that is not done with another. Many people feel that restricting variation of what a teacher or therapist does will harm students and patients. This is especially true in mental health where, to get a control group, one treatment would be chosen randomly instead of another. In many drug studies treatment is withheld in half the patients and a placebo given to the other half. A further consideration is that a practitioner may feel that doing research interferes with the quality of professional practice, although there is no evidence to support this contention. In fact, people who participate in studies generally do better, as shown by the placebo effect.

Conclusion

The number and complexity of the possible outcomes of interventions also leads to problems in studying adult development. Professionals are quite often loath to reduce the complex changes that may arise in therapy and education to operationalized performance on a few scales. Hence, only a few studies tease apart these two threads of adult development—namely, the threads of the direction of development and its subvariables and the threads of the manner studied and its subvariables.

Even fewer studies consider the multidimensional nature of adulthood and adult development, and fewer yet consider some of the fundamental bases of adult life—for example, "nature versus nurture" and the implications of evolution. The nature-nurture issue is hardly explored. The evolutionary basis for what is common in development among adult humans has not been studied much, and those studies that have been done have, more often than not, been outside of psychology. The evolutionary basis of adult behavior includes, on one hand, the genetic basis for what varies among humans, and the environmental basis includes, on the other hand, what commonalities and differences are due to childhood experiences. These last explorations, as to what childhood experiences determine which adult behaviors, are most often naturalistic studies. Frequently, the gross environmental variables that represent possible determinants of adult life are income, education of mother and father, own education, social class, culture and subculture, gender, gender roles in society, age roles in society, mental illness, method of parenting, spousal status, family arrangement, and politics. If most studies included such gross variables, the increased comparability of the studies might make clearer which of these variables are more highly predictive of various adult developmental outcomes. Although most of these variables should be included, specific determinants should be examined as well.

My hope is that we can get people from the different approaches represented by the various threads of adulthood and its development talking to each other. Through such discussion, people from the different threads may form a more integrative view of adult development. This should be especially useful in positive adult development. Often, different content and different methodology in the various domains obscures a commonality and unity of the phenomena.

New tools must be developed and used to make comparisons across instruments easier. For example, both Kurt Fischer and I have measured development in many domains using the same form of measurement tools. For Fischer, these have included supported tests of performance on a task. In this kind of measurement, there is a standard demonstration of a solution to a task followed by tests of performance on that task. I myself have used standard unsupported interviews and written multiple-choice problems. We have also tried to examine the relationship between the complexity of tasks people solve and the content of those tasks.

Theories in our field need to be less metaphorical and polemical, and they need to be clearer on what is assumed, asserted, and measured. Also, the relationship between what knowledge now exists and the resulting choice of method of inquiry should be stated. Changes like these would help tie together the threads of adult development.
