

Introduction: Attaining a New Stage

Michael Lampion Commons¹

The current issue of *The Journal of Adult Development* addresses one of the threads of adult development, namely stage and stage change. There are four major forms of adult developmental study that can be identified: positive adult development, directionless change, stasis, and decline. The first of the four forms, positive adult developmental processes, is divided into at least six areas of study: hierarchical complexity (orders, stages), knowledge, experience, expertise, wisdom, and spirituality. The topic of this special issue, stage and stage change, is therefore part of the study of positive adult developmental processes. Finally, the manner in which these topics are studied both in this special issue and elsewhere can be characterized in terms of three broad classifications (Commons & Bresette, 2000, Commons & Miller, 1998) for the acquisition of knowledge and the verification of truth in general. These classifications include analytic, experiential, and empirical means to reach truth.

KEY WORDS: positive adult development; stage; stage change; orders of hierarchical complexity; knowledge; experience; expertise; wisdom and spirituality.

The current issue of *The Journal of Adult Development* addresses one of the threads of adult development (Commons, 1998) namely stage and stage change. These threads, the sequence of events in a life's unspoken narrative, are like successive parts of a hypercomplex lattice. Each thread can be represented by a series of points along a conceptual axis or variable. Such variables lie in two domains: (a) content—the direction of adult development and its subvariables and (b) process—namely, the manner in which issues are studied and their subvariations. These variables are often complex—more like systems than single variables. Examples of some of these variables and subvariables are given below. Each of the studies of adult development in this issue can be considered to be embedded in one or more of these threads.

DIRECTION OF DEVELOPMENT

Four major forms of adult developmental study can be identified: positive adult development, direc-

tionless change, stasis, and decline. Each can be further subdivided. The first of the four forms, *positive adult developmental processes*, is divided into at least six areas of study: 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, focuses on the finding that there is no change—especially no decline between something measured at two ages. *Decline*, the fourth form, is divided into at least six areas: retrieval memory, memory speed, horizontal complexity (*bits*), strength, agility, and health.

This special issue addresses the first of the four forms, positive adult developmental processes, that is, stage and stage change. The manner in which these topics are studied in this special issue varies and can be characterized in terms of three broad classifications (Commons & Bresette, 2000; Commons & Miller, 1998) for the acquisition of knowledge and the verification of truth in general.

The first kind of pursuit of truth is analytic. This pursuit requires no independent observations.

¹To whom correspondence should be addressed at Program in Psychiatry and Law, Department of Psychiatry, Harvard Medical School, Massachusetts Health Center, 74 Fenwood Road, Boston, Massachusetts 02115-9196; e-mail: commons@tiac.net.

It consists of constructing systems based on axioms. Philosophical, logical, and mathematical works, including computer simulations, fall into this category. Much of the Commons and Richards's paper in this issue "Organizing Components into Combinations: How Stage Transition Works" falls into this category. It argues that studying adult development as a measurable, dialectical transition process opens up a new and fruitful direction for research. It marks a shift in study from developmental status to developmental process. This shift parallels Fischer's focus on microdevelopment. The process view of positive adult development differentiates characteristics of transition steps from those of stages (e.g., relativism belongs to a transition step between all stages). In Commons and Richards's approach, performance is examined as steps in a dynamic transition process. These steps are related to the notions of personality types, emotional states, behavioral intervention strategies, reflective understanding, and other psychological factors.

The second kind of pursuit of truth is experiential. It is based upon one independent observation although multiple participants may report the same experience. Examples of this are fiction, music, movies, and religion. None of the current papers rely on this form of verification.

The third kind of pursuit of truth is empirical. This pursuit requires two independent paths for the observation of the same events. Empirical truth may be further broken down into four paradigms. The first methodology consists of the highly useful but chaotic and inconsistent historical paradigms. These might be whole-life studies, clinical studies, descriptive studies from various perspectives, or evaluations of proclivities, performances, or attitude.

For empirical truth, a second methodological paradigm consists of three possibilities. First, there are interviews, both structured and unstructured. The McAuliffe study of the influence of a program of study on students' development in this issue falls into this category. A second method for pursuing empirical understandings lies in questionnaires. Third, are tests of many different forms, including profile-generating tests of personality, interests, abnormality, and skill on one hand, and single-scale tests of development, strength, impairment, acuity, and sensitivity on the other.

The data from the first set of papers by Commons and Richards (2002), by Swan and Benack (2002), and by Wolfson (2002) fall into this category. Data reported include emotional responses and distress during transition, and factors that inhibit or facilitate

transition to the next stage. Swan and Benack (2002) suggest the role of emotional distress in the transition process from an object relations model. Wolfson's (2002) paper presents a behavioral intervention approach that is based in large part on the transition steps from Commons and Richards, steps that were derived from Piaget's 4-phase probability model for succeeding on conservation tasks. Also, Wolfson links the reduction of stress through mind-body techniques to the ease of stage transition. The rest of the papers are less directly concerned with transition steps per se but their intervention methods and findings might be cast in the perspective of transition as well.

The third methodological paradigm is simply quasi-experiments. The fourth methodological paradigm is simply true experiments. True experiments have true independent variables. Quasi-experiments use naturally occurring variables such as male versus female, previous score on a test, and so forth. Many of these experimental means for studying adults may be carried out cross-sectionally or longitudinally. 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. But the participants are studied only once.

The data from the rest of the studies fall into the third methodological paradigm of quasi-experiments. The second set of papers address the effects of educational and professional preparation experience on aspects of adult cognitive development: McAuliffe's (2002) "Adult Development in One Program of Counselor Training: An Exploratory Inductive Inquiry" and Brendel, Kolbert, and Foster's (2002) Promoting Student Cognitive Development "Student Changes, Program Influences."

The third set of papers addresses empirical relationships among stage, age, education, and experiential factors. These include Hood and Deopere's (2002) "The Relationship of Cognitive Development to Age: When Education and Intelligence are Controlled For," and Lovell's (2002) "Development and Disequilibrium: Predicting Counselor Trainee Gain and Loss Scores on the *Supervisee Levels Questionnaire*" (2002).

REFERENCES

- Bijou, S., & Baer, D. M. (1961). *Child development. The Century psychology series*. New York: Appleton-Century-Crofts.
- Brendel, J. M., Kolbert, J. B., & Foster, V. A. (2002). *Promoting student cognitive development*, 9(3), 217-227.

- Commons, M. L. (1999). Threads of adult development. *Adult Development*, 1–2.
- Commons, M. L., & Bresette, L. M. (2000). Major creative innovators as viewed through the lens of the general model of hierarchical complexity and evolution. In M. E. Miller & S. Cook-Greuter (Eds.), *Creativity, spirituality, and transcendence: Paths to integrity and wisdom in the mature self* (pp. 167–187). Stamford, CT: Ablex Publishing.
- Commons, M. L., Danaher, D. L., Miller, P. M., Goodheart, E. A., Dawson, T. L., Johnstone J., et al. (2000). *Hierarchical Complexity Scoring System (HCSS): How to score almost any text or discourse in any domain for hierarchical complexity of performance (stage) with 95% reliability and for transition steps*. Unpublished scoring manual available from Commons@tiac.net or Michael L. Commons, program in Psychiatry and the Law, 74 Fenwood Road, Boston, MA 02115.
- Commons, M. L., & Miller, P. M. (1998). A quantitative behavior-analytic theory of development. *Mexican Journal of Experimental Analysis of Behavior*, 24(2), 153–180.
- Commons, M. L., & Nevin, J. A. (Eds.). (1981). *Quantitative analyses of behavior: Vol. 1. Discriminative properties of reinforcement schedules*. Cambridge, MA: Ballinger.
- Commons, M. L., & Richards, F. A. (2002). Organizing components into combinations: How stage transition works. *Journal of Adult Development*, 9(3), 157–175.
- Commons, M. L., Richards, F. A., & Armon, C. (Eds.). (1984). *Beyond formal operations: Vol. 1. Late adolescent and adult cognitive development*. New York: Praeger.
- Dawson, T. L., Commons, M. L., & Wilson, M. (2002). *The shape of development*. Manuscript in preparation.
- Fischer, K. W., & Granott, N. (1995). Beyond one-dimensional change: Parallel, concurrent, socially distributed processes in learning and development. *Human Development*, 38(6), 302–314.
- Flavell, J. H. (1963). *The developmental psychology of Jean Piaget*. New York: Van Nostrand.
- Hood, A. B., & Deopere, D. L. (2002). The relationship of cognitive development to age, when education and intelligence are controlled. *Journal of Adult Development*, 9(3), 227–232.
- Kuhn, D., & Brannock, J. (1977). Development of the isolation of variables scheme in experimental and ‘natural experiment’ contexts. *Developmental Psychology*, 13, 9–14.
- Lovell, C. W. (2002). Development and disequilibrium: Predicting counselor trainee gain and loss scores on the Supervisee Levels Questionnaire. *Journal of Adult Development*, 9(3), 233–238.
- McAuliffe, G. J. (2002). Student changes, program influences, and adult development in one program of counselor training: An exploratory inductive inquiry. *Journal of Adult Development*, 9(3), 203–214.
- Piaget, J. (1976). *The grasp of consciousness: Action and concept in the young child* (S. Wedgwood, Trans.). Cambridge: Harvard University Press.
- Rasch, G. (1980). *Probabilistic model for some intelligence and attainment tests*. Chicago: University of Chicago Press.
- Richards, F. A., & Commons, M. L. (1990). Applying signal detection theory to measure subject sensitivity to metasystematic, systematic and lower developmental stages. In M. L. Commons, C. Armon, L. Kohlberg, F. A. Richards, T. A. Grotzer, & J. D. Sinnott (Eds.), *Adult development: Vol 2. Models and methods in the study of adolescent and adult thought* (pp. 175–188). New York: Praeger.
- Spada, H., & McGraw, B. (1985). The assessment of learning effects with linear logistic test models. In S. E. Embretson (Ed.), *Test design developments in psychology and psychometrics*. Orlando, FL: Academic Press.
- Swan, T., & Benack, S. (2002). Narcissism in the epistemological pit. *Journal of Adult Development*, 9(3), 177–183.
- Vygotsky, L. S. (1962). *Thought and language*. New York: Wiley.
- Vygotsky, L. S. (1966). Development of the higher mental function. In *Psychological research in the U.S.S.R.* (pp. 44–45). Moscow: Progress Publishers.
- Wolfsont, C. (2002). Increasing behavioral skills and level of understanding in adults: A brief method integrating Dennison’s Brain Gym® Balance with Piaget’s reflective processes. *Journal of Adult Development*, 9(3), 185–201.

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