Career Adaptability: An Integrative Construct for Life-Span, Life-Space Theory

Mark L. Savickas

The four segments in the life-span, life-space approach to comprehending and intervening in careers (individual differences, development, self, and context), constitute four perspectives on adaptation to life roles. Adaptation serves as a bridging construct to integrate the complexity engendered by viewing vocational behavior from four distinct vantage points. To correspond to adaptation as the core construct, career adaptability should replace career maturity as the critical construct in the developmental perspective on adaptation. Moreover, adaptability could be conceptualized using developmental dimensions similar to those used to describe career maturity, namely planning, exploring, and deciding.

Similar to almost every practitioner of vocational guidance, Donald Super initially relied heavily on trait-and-factor theory and methods as he counseled clients. When he began his college teaching career, his first two major writing projects were a vocational guidance textbook (1942) and a vocational assessment textbook (1949), which both advanced the seminal paradigm constituting the individual differences approach to matching people to occupational positions (Parsons, 1909). About the time he earned promotion to the rank of professor, Super's attention turned from trait-and-factor theory and practice to the construction of a career development theory. He intended to augment, not replace, trait-and-factor theory. Later in his own career, he chafed when people forgot that he was and remained a trait-and-factor counselor, yet one who also used additional perspectives to foster clients' choice of and adjustment to work (Super, 1984).

In retrospect, it is quite clear that Super never meant to produce an alternative theory to replace the venerable matching paradigm, but instead envisioned additional perspectives from which to im-

Mark L. Savickas is a professor in and chair of the Behavioral Sciences Department at Northeastern Ohio Universities College of Medicine. Linda Subich was action editor for this article. Correspondence regarding this article should be sent to Mark L. Savickas, NEUCOM, 4209 State Route 44, Box 95, Rootstown, OH 44272-0095.

prove and elaborate on the way practitioners and researchers comprehend and intervene in occupational choice and career development. The three major vantage points, in addition to the differential perspective, from which Super viewed careers and their life course can be called the *developmental, self,* and *contextual* perspectives. Eventually, he loosely coalesced these perspectives into the life-span, life-space approach to careers.

The life-span, life-space theory of careers evolved over 40 years as Donald Super and his collaborators worked to refine, elaborate, and renovate it (Super, Savickas, & Super, 1996). The evolution of this approach to comprehending and developing careers can be traced in its name changes from the original "Career Development Theory" to "Developmental Self-Concept Theory" and then to the current "Life-Span, Life-Space Theory." Each name change signified an elaboration of the theory to address more completely the complexity of vocational behavior in manifold settings across diverse groups.

The first name, "Career Development Theory," (Super, 1957) denoted the addition of a developmental perspective on careers to the traditional individual differences view of occupations. The seminal idea in the differential psychology or trait-and-factor approach to vocational guidance remains the directive that counselors should match clients' abilities and interests to occupational positions that offer congruent requirements and rewards. Super's career development theory segment attends to how individuals construct and negotiate their work lives and specifies predictable tasks and coping behavior that individuals encounter as they develop their careers. The developmental perspective of this theory segment augments the trait-and-factor concentration on differences among individuals and between occupations in calling attention to the individual's life course. Counselors who use this career development theory, in addition to matching people to positions, can help individuals anticipate developmental tasks, form critical decisional attitudes and competencies, and then engage in realistic vocational coping behaviors.

"Developmental Self-Concept Theory" (Super, 1981) added the phenomenological perspective and a new theory segment that emphasizes the role of self-concepts in career development. The original career development theory segment had asserted that occupational choice implements a self-concept. The new theory segment explicitly articulated the processes involved in the formation, translation, and implementation of a self-concept as well as how self-concept affects vocational behavior. The third and final theory segment, life-span, life-space theory (Super, 1990), added a contextual perspective that deals with social roles and broadens attention from concentration on the work role to highlighting the constellation of all life roles. Using constructs such as role salience and life structure, this theory segment deals with how individuals situate the work role among their other life roles, and then use the resulting life structure to fulfill their personal values.

Super labored for four decades to construct and refine these three theory segments and articulate how each augments traditional trait-and-factor theory. He hoped someday to integrate these segments

into a comprehensive model. Toward this end, Super's (1992, 1994) final two book chapters addressed this topic and he initiated and contributed to a conference on convergence in career theories (Savickas & Lent, 1994). Unfortunately, Super died before undertaking the actual task of integrating the major segments in his own life-span, life-space theory. The current article examines the theory's origin and current status before proposing one way in which to integrate its segments. The article begins by discussing Super's *functionalist* strategy for theory construction and the outcomes and consequences of this strategy.

THE FUNCTIONALIST APPROACH TO UNDERSTANDING CAREERS

Functionalism is a system of psychology founded by John Dewey (1896) and James Angell (1903), and advanced by Harvey Carr (1925), while they were at the University of Chicago. Functionalism was the first American system of psychology and it held sway until the Great Depression, eventually being displaced by behaviorism. The leading proponents of functionalism worked at the University of Chicago and were bolstered by a group of psychologists at Columbia University led by Robert Woodworth (1918) and John Dewey, who had moved to Columbia in 1904.

Functionalism addresses how individuals adapt to their situations by posing two basic questions: "What do people do?" and "Why do they do it?" (Marx & Hillix, 1963, p. 84). Functionalists prefer to answer these questions tentatively, based on empirical research about important variables in the adaptive process. They emphasize concepts that interrelate the variables rather than constructing logicodeductive, superordinate superstructures.

Super was well schooled in functionalism. His mentor in graduate school and beyond, Harry Dexter Kitson (1917), had written a doctoral dissertation at the University of Chicago on "The Scientific Study of College Students," under the guidance of Angell and Carr. Furthermore, Super worked as a professor at Teachers College, Columbia from 1945 to 1975, where he continued to experience the influence of John Dewey's original functionalism and Robert Woodworth's (1918) branch of dynamic functionalism. Clearly, Super's graduate education with Kitson and the work environment at Teachers College strengthened his preference for the functional approach to theory construction, devotion to data, and resistance to premature formulation of explanatory postulates.

Super's Functionalist CareerTheory and Its Segments

Throughout his career, Super used the functionalist approach to become the "empirical integrator" (Underwood, 1957, p. 290–291) for the fields of vocational psychology and career counseling. He occasionally referred to his scholarly undertakings as "compilation projects," meaning he sought to compile existing knowledge on a

topic. Super selected a topic and then synthesized what had been learned by researchers and theorists into conceptual models that allowed him and others to note contradictory findings, locate gaps in the research, and attempt explanatory efforts. Two of his early compilation projects organized and synthesized available information on vocational guidance (Super, 1942) and vocational testing (1949). His next major compilation project focused on knowledge about careers (Super, 1957). This review of the literature about careers allowed Super to formulate his theory of career development, in part, as a response to the criticism that vocational counselors acted without a theory (Ginzberg, Ginsburg, Axelrad, & Herma, 1951). Super's career development theory (1953), stated in the form of 10 propositions, carefully expressed the best of then current knowledge. These propositions are really a series of summarizing statements. They fit Marx's (1963) definition of functional theory because they are "more or less informal explanatory propositions which are closely related to data (empirical propositions) and without fixed logical form" (p. 43). Although Super occasionally revised the postulates (Salomone, 1996), they have remained a series of summarizing statements, albeit with considerable utility and influence in vocational psychology and career counseling.

Career maturity segment. The pivotal contribution of career development theory (Super, 1955) consisted of a model for adolescent career maturity or the readiness to make educational and vocational choices. Super later elaborated this career maturity model to address the complete life span (Super, 1984). Nevertheless, the focus remained on a structural model of career maturity in adolescents. The model structures career maturity using four dimensions to describe it. Two attitudinal dimensions deal with dispositional response tendencies for foresight and curiosity: attitudes toward career planning and career exploration. Two cognitive dimensions deal with fund of information and rational decision making: knowledge about occupations and careers and knowledge about the principles and practice of career decision making. These four dimensions are operationally defined in the Career Development Inventory (Thompson, Lindeman, Super, Jordaan, & Myers, 1984).

Self-concept segment. At mid-life, Super recognized the need to revise his career development theory and his 1957 book. After a period of career renewal, he decided to innovate rather than revise what he had already done. He turned his attention to the role of self-concepts in career development and eventually produced his Development Self-Concept Theory segment. Variables such as self-esteem and self-efficacy are each concepts about the self. Super (1963) organized and synthesized the diverse types of self-concepts that researchers had investigated into a comprehensive system of self-concept dimensions and metadimensions. In due course, he examined the implications of these dimensions and metadimensions for vocational behavior and presaged the insights of later "self" theorists from the disciplines of sociology and psychology.

Life-space segment. After his retirement from Teachers College in 1975, Super reassessed his own life and professional contributions.

Moreover, he reflected on the cultural changes occurring as society moved to a post-industrial era. Super became convinced that life in the information age could not be grounded in occupational roles. Contemporary "dejobbing" of individuals and the "re-engineering" of organizations continue to show the wisdom of his observation. To respond to societal changes, Super proposed that counselors shift their emphasis on the work role and instead concentrate on the rainbow of life roles enacted in the theaters of home, school, work, and community.

Accordingly, life-role salience became the pivotal construct in Super's innovative theory of careers in "life-space." The life-space model does not assume that work is the central role in a person's life; instead, it highlights the importance of the work role in relation to other roles (Super, 1984). Accordingly, the theory responds, at least in part, to postmodern and feminist criticisms of vocational psychology and career intervention (Savickas, 1995). For example, Richardson (1993) has pointed out that traditional career counseling focuses on the work role and emphasizes interactions with an employer while ignoring the multiple contexts of a life. Understanding work in context highlights the fact that work is a social contribution that connects one to a community and brings one into relation with other people. Richardson urged counselors not to concentrate on the career but to focus on the role that work plays in a person's life. This focus helps counselors to appreciate the particulars of the client's situation and allows them to foster the client's full development and well-being, as well as to match the client with occupations that correspond to her or his life structure and life themes (Savickas, 1993). Thus in addition to fitting people to occupations, counselors help people to fit work into their lives.

Current status. Near the end of his own career, Super (1990, 1992, 1994) recognized the need to integrate his theory segments into a single, parsimonious model. Joining the career maturity and the life-space segments using the "cement" of the self-concept segment produced his final version of the life-span, life-space approach to careers (Super, 1981). This rubric denotes a joining rather than a fundamental integration of theory segments. The theory remains a viable model for organizing practice and research because it systematically isolates and classifies facts, identifies important variables, and synthesizes knowledge.

When referring to life-span, life-space theory, Super (for example, 1981) used the term *theory* in its simplest meaning: to organize. Life-span, life-space theory is a functional theory because it is a "modest utilization of organized conceptualizations, with more explicit emphasis upon the provisional and tool character of theory" (Marx, 1963, p. 16). However, for the theory to advance, practitioners and researchers must build on the functionalist accomplishments and work to interdigitate the discrete segments into a single, comprehensive theory that meets the tenets of modern theory construction. The goal is to move the theory from an organization and summarization of existing knowledge to a form in which its logico-deductive principles generate new hypotheses and fresh insights. A first step

toward this goal of moving from organization to explanation could be an examination of the critiques of life-span, life-space theory to identify suggestions for segment integration.

Critiques of Functionalist CareerTheory

The strengths of life-span, life-space theory include the emphasis on empirical findings, propositions that summarize data and empirical findings, and reluctance to prematurely postulate logico-deductive explanatory principles. These strengths are, from another vantage point, its weaknesses. In discussing the theory's comprehensive scope, Brown (1990) admired life-span, life-space theory's ability to address the full complexity of careers in diverse groups across dissimilar settings. Yet he rightly criticized the theory for its fragmented structure and lack of parsimony.

Swanson (1992), in a literature review focused on recent research concerning the life-span and the life-space segments of the theory, concluded that life-span research continues to emphasize the exploration stage and initial career choice among adolescents, whereas life-space research emphasizes the establishment and maintenance stages. She urged increased research on life-space constructs among adolescents and young adults as well as more research on life-span constructs among middle and older adults. Furthermore, Swanson appropriately articulated the need for a greater integration of the life-span and life-space lines of research.

The first potential fulcrum for integrating the segments was self-concept theory. Super explored its potential, and rather than producing integration, it produced a separate segment, one that subsequently has been interdigitated effectively with the differential model for matching. More recently, Super (1990) and others have identified the constructs of learning and decision making as potential integrative variables. Both learning and decision making are career development processes. As processes, they deal with how things are done, not with what is done. Coping processes are distinct from developmental tasks and the attitudes and competencies that condition them. Krumboltz (1994) and Lent and Hackett (1994) have proposed that learning processes could explain how individuals acquire career choice attitudes and competencies. Brown (1990) and Gati (1996) have suggested that decisional processes could be a fulcrum for segment integration, especially if researchers focused on how individuals use intuition and compromise as they actually make decisions. Despite the clear potential of learning and of decision making as bridging constructs, I prefer to speculate on a different construct: adaptation.

FUTURE DIRECTIONS FOR THEORY DEVELOPMENT

It may not be necessary to look beyond life-span, life-space theory itself to identify a bridging construct that can link its segments. A

broader construct than learning or decision making is already available within the theory, namely, adaptation. Learning and decision making are components of adaptation. Furthermore, adaptation offers a better and more fundamental answer to the functionalist question "What do people do?"—they adapt to their situations. The answer to the question "Why do they do it?" remains the same as in current life-span, life-space theory. They adapt in an effort to better implement their self-concepts in their situations. Increased congruence further develops the self toward greater wholeness and engagement in the world. Thus, an individual seeks to develop or to improve congruence of person–position fit while at the same time becoming more like the person that she or he wants to be. Notice that such a mapping sentence incorporates the four perspectives of individual differences, development, self, and context.

Adaptation seems like a particularly appropriate construct for bridging theory segments because of its great relevance to vocational psychology. The root of the word *adaptation* is *apt,* meaning quick to learn or understand, a root meaning already used in the career construct of aptitude. The word *adapt* can be traced, through Latin and French, to *ad aptare,* meaning "to fit." Of course, this idea of fit (or congruence) remains the central construct in trait-and-factor or person-environment theory. Adaptation, meaning to make more suitable (or congruent) by changing, also coincides with the developmental perspective on careers. It suggests a flexibility in responding to the environment, without the negative connotations of similar words such as *adjust, accommodate,* and *conform.* The word *adapt* also fosters a teleologic view by emphasizing the purpose for which the change must be made. Furthermore, adaptation emphasizes the interaction between the individual and the environment. This shift in attention from the individual to the individual-in-situation coincides with contextual and multicultural perspectives on work. All in all, adaptation seems to be a marked improvement on the biological construct of maturation.

Because it touches each segment, the construct of adaptation offers a potential bridge across the individual differences, developmental, self, and contextual segments in life-span, life-space theory. The four perspectives on careers bring into focus different aspects of adaptation. The individual differences perspective focuses on the objective status of an individual's adaptive skills and styles for fitting self into situation. The phenomenological perspective centers on the subjective goals of adaptation that a self constructs and values as she or he subjectively authors a life story and strives to become more complete and more fully engaged with the world. The developmental perspective highlights the functions and processes of adaptation across the life course. And finally, the contextual perspective concentrates on the historical and cultural situation, with its attendant barriers and affordances, within which the individual must adapt and flourish. When career theorists and practitioners integrate these four perspectives on a client, theory and practice become more meaningful and compassionate because they deeply understand and comprehensively address what is at stake for the individual.

Career Adaptability

As a first step in bridging the segments of life-span, life-space theory, I propose that career adaptability replace career maturity as the central construct in the career development theory segment. Originally, Super (1955) identified maturation as the central process in adolescent career development. Eventually, career maturity proved to be less useful for comprehending career development in adults. Accordingly, Super and Knasel (1981) identified adaptation as the central developmental process for adults. Now it seems worthwhile to drop maturity from the adolescent model and replace it with adaptability.

At this point in time, adaptability seems to be a more useful construct than maturity. Adaptability means the quality of being able to change, without great difficulty, to fit new or changed circumstances. The connotation of unending change improves on maturity and the stage model by emphasizing a continual need to respond to new circumstances and novel situations, rather than to master a predictable and linear continuum of developmental tasks. With this in mind, I have defined career adaptability as the readiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions.

The change from career maturity to career adaptability simplifies life-span, life-space theory by using a single construct to parsimoniously explain development in children, adolescents, and adults. Furthermore, the change tightens the integration between the life-span, life-space, and self-concept segments by focusing each on the individual's adaptation to environmental context and emphasizing a single source of motivation. A focus on adaptation furthers theory elaboration by prompting and facilitating the use of conceptual models and research finding from related disciplines such as developmental, personality, and social psychology. For example, recent advances in developmental psychology such as "developmental contextualism" (Vondracek & Kawasaki, 1995) and "developmental systems" (Ford & Lerner, 1992) provide insights about adaptability and motivation that could improve life-span, life-space theory. Of course, elaborating the implications of this proposed change requires careful attention to the existing theory and relevant empirical research.

A change to career adaptability would focus counselors' attention on developing readiness to cope in clients of all ages, across all life roles. Adaptability, whether in adolescents or in adults, involves planful attitudes, self- and environmental exploration, and informed decision making. Counselors could help individuals to continually, throughout the life course, look ahead to anticipate choices and transitions, explore possibilities, and choose directions that improve fit and develop the self. When evaluating individual readiness to adapt, counselors and researchers could assess the processes of adaptability and their developmental course in terms of planful foresight, exploration of the situation, relevant knowledge about self and situation, and decisional skill. The outcomes could be assessed in

terms of increase or decrease in person-situation congruence and movement toward self-completion.

The cultural climate for switching from maturity to adaptability seems right. The construct of career adaptability coincides with the increased interest in adult development as well as our more rapidly changing technology and economy. It also can help highlight the need for and the problems of life-cycle transitions, beginning with the transition from school to work, a transition that seems more like an adaptive challenge than a maturational task. Counselors and clients might even prefer the word itself and the idea of adaptability because it lacks the evaluative connotations of maturity.

If adaptation and adaptability are to become bridging constructs for integrating life-span, life-space theory, then practitioners and researchers must thoroughly examine their theoretical validity and practical usefulness. An initial effort toward this end could include a conceptual analysis of the wisdom of appropriating the dimensions of adolescent career maturity for defining the process dimensions of career adaptability. My immediate impression is that planning, exploring, and deciding do seem to be important process dimensions of adaptability. In the next article in this issue, David Blustein (1997) appraises the conceptual viability of appropriating exploration as a developmental dimension of adaptability for life roles. His context-rich, social constructionist perspective expands the meaning and importance of exploration as a critical dimension in career adaptability.

In the article that follows Blustein's (1997), Susan D. Phillips (1997) assesses whether knowledge about the principles and practice of deciding makes sense as a dimension of adaptability for life roles. After discussing the over-emphasis on rationality and technique in the career maturity view of decision making, Phillips contributes a new construct—adaptive decision making—as a critical dimension in career adaptability. The remainder of the current article briefly considers planful attitudes, a third important developmental dimension of career adaptability.

Planfulness

For decades, planful attitudes served as the bedrock of Super's theorizing about career maturity. He conceptualized planfulness (despite its not being a word recognized by any dictionary) as the prime component in career choice readiness. Later empirical work in the Career Pattern Study and on the Career Development Inventory (Thompson et al., 1984) supported this insight. In attempting to extend the model of career maturity to the adult years, planfulness again emerged as the critical variable. Accordingly, planfulness remained the core construct in Super's model of career adaptability in adults, and, subsequently, Super, Thompson, and Lindeman (1988) operationally defined it with the Adult Career Concerns Inventory.

Future orientation and planning attitudes, which sustain career choice readiness and adaptability, are equally important in preparing for success and satisfaction in all life roles. Moving beyond an exclusive focus on occupations as makers of the self, counselors are

now helping clients realize that their various values and interests can be fulfilled in different roles. All of life's gratification does not come from work. An individual's abilities, values, and interests can be implemented through many social roles, not just the work role. For example, counselors already have leisure reports available from the Strong Interest Inventory (Harmon, Hansen, Borgen, & Hammer, 1994). Is it too far-fetched to think of similar reports for other life roles? A few counselors already use interest inventory results to help individuals select community volunteer activities and to strengthen marital ties.

Going even further, Super proposed considering the constellation of roles and how an individual patterns them, rather than looking at a client's social role in isolation. Practitioners who have come to the same conclusion are rapidly transforming twentieth-century career counseling into twenty-first century life planning (Brown, 1988; Hansen, 1997). Balancing and sequencing commitments to school, work, family, leisure, worship, and the community requires careful planning. In other words, designing a life structure may eventually subsume managing a career, like career management has subsumed occupational choice.

This type of life planning requires a future orientation. Individuals must foresee the life roles available in their environments and concern themselves with preparing for and patterning them. *Orientation* means to be aware of and familiar with. Individuals must become aware of their life course with its theaters and roles, and then involve themselves in thinking about plotting their futures (Cochran, in press). If they use the present as the dominant time zone in making important decisions, they may lose their future (Savickas, 1991). Because a future orientation and planful attitudes are the sine qua non of mental health in Western culture, planfulness must be an important dimension of adaptability.

Planful attitudes can be learned, thereby allowing individuals an important means of increasing their adaptability. Career interventions that foster a concern with tomorrow have been shown to increase future orientation and planful attitudes (Savickas, 1991). Once poised toward the future, the individual can make tomorrow real by exploration that densely populates the future with anticipated events and by decision making that connects these events to present choices, whether through rational logarithms or intuitive dreams. Thus, planfulness, as the core dimension of adaptability, may facilitate exploration and decision making, and together these three elements may characterize the critical developmental dimensions of career adaptability.

SUMMARY

The life-span, life-space approach to understanding careers has evolved over four decades to the point where it now includes three segmental theories (i.e., a career development theory, a developmental self-concept theory, and a life-role theory) that augment the individual differences theory of matching people to positions. This segmented

approach to comprehending careers arises from an epistemic stance grounded in early twentieth-century functionalism. Functionalist methods for theory construction have produced both the strengths and the weaknesses of life-span, life-space theory. Currently, its major weakness is its fragmented structure, with the concomitant complexity and lack of parsimony. Possibilities for integrating the disparate segments of the life-span, life-space approach to knowledge organization and construction include the use of processes such as learning, decision making, or adaptation as bridging constructs. I contend that adaptation offers the greatest potential for integrating the segments, increasing the theory's parsimony, and generating explanatory principles and new hypotheses.

To correspond to adaptation as the core construct in life-span, life-space theory, I also propose that adaptability replace maturity as the cardinal dimension in the developmental perspective on adaptation. Moreover, adaptability should be conceptualized using developmental dimensions similar to those used to describe career maturity, namely, planning, exploring, and deciding. From this perspective, career counseling includes helping a client to look ahead and to look around, to develop the self, and, in due course, to choose suitable and viable opportunities to become the person she or he wants to be.

REFERENCES

Angell, J. R. (1903). The relations of structural and functional psychology to philosophy. *Philosophical Review, 12,* 243–271.

Blustein, D. L. (1997). A context-rich perspective on career exploration across life roles. *The Career Development Quarterly, 45,* 260–274.

Brown, D. (1988, January). *Life role development and counseling.* Paper presented at the meeting of the National Career Development Association, Orlando, FL.

Brown, D. (1990). Summary, comparison, and critique of the major theories. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (2nd ed., pp. 338–363). San Francisco: Jossey-Bass.

Carr, H. A. (1925). *Psychology: A study of mental activity.* New York: Longmanns.

Cochran, L. (in press). *Career counseling as narrative construction.* Newbury Park, CA: Sage.

Dewey, J. (1896). The reflex arc concept in psychology. *Psychological Review, 3,* 357–370.

Ford, D. H., & Lerner, R. M. (1992). *Developmental systems theory: An integrative approach.* Newbury Park, CA: Sage.

Gati, I. (1996). Computer-assisted career counseling: Challenges and prospects. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 169–190). Palo Alto, CA: Davies-Black.

Ginzberg, E., Ginsburg, S. W., Axelrad, S., & Herma, J. L. (1951). *Occupational choice: An approach to a general theory.* New York: Columbia University Press.

Hackett, G., & Lent, R. W. (1992). Theoretical advances and current inquiry in career psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (2nd ed., pp. 419–451). New York: Wiley.

Hansen, L. S. (1997). *Integrative life planning: A framework for career development in the 21st century.* San Francisco: Jossey-Bass.

Harmon, L., Hansen, J. C., Borgen, F., & Hammer, A. (1994). *Strong Interest Inventory manual.* Palo Alto, CA: Consulting Psychologists Press.

Kitson, H. D. (1917). The scientific study of the college student. *Psychological Monographs, 23.*

Krumboltz, J. D. (1994). Improving career development theory from a social learning perspective. In M. L. Savickas & R. W. Lent (Eds.), *Convergence in career development theories* (pp. 9–31). Palo Alto, CA: CPP Books.

Lent, R. W., & Hackett, G. (1994). Sociocognitive mechanisms of personal agency in career development: Pantheoretical prospects. In M. L. Savickas & R. W. Lent (Eds.), *Convergence in career development theories* (pp. 77–101). Palo Alto, CA: CPP Books.

Marx, M. H. (1963). The general nature of theory construction. In M. H. Marx (Ed.), *Theories in contemporary psychology* (pp. 4–46). New York: Macmillan.

Marx, M. H., & Hillix, W. A. (1963). *Systems and theories in psychology.* New York: McGraw-Hill.

Parsons, F. (1909). *Choosing a vocation.* Boston: Houghton-Mifflin.

Phillips, S. D. (1997). Toward an expanded definition of adaptive decision making. *The Career Development Quarterly, 45,* 275–287.

Richardson, M. S. (1993). Work in people's lives: A location for counseling psychologists. *Journal of Counseling Psychology, 40,* 425–433.

Salomone, P. R. (1996). Tracing Super's theory of vocational development: A 40-year retrospective. *Journal of Career Development, 22,* 167–184.

Savickas, M. L. (1991). Improving career time perspective. In D. Brown & L. Brooks (Eds.), *Techniques of career counseling* (pp. 236–249). Needham Heights, MA: Allyn & Bacon.

Savickas, M. L. (1993). Career counseling in the postmodern era. *Journal of Cognitive Psychotherapy: An International Quarterly, 7,* 205–215.

Savickas, M. L. (1995). Current theoretical issues in vocational psychology: Convergence, divergence, and schism. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology* (2nd ed., pp. 1–34). Hillsdale, NJ: Erlbaum.

Savickas, M. L., & Lent, R. W. (1994). *Convergence in career development theories: Implications for science and practice.* Palo Alto, CA: CPP Books.

Super, D. E. (1942). *The dynamics of vocational adjustment.* New York: Harper & Row.

Super, D. E. (1949). *Appraising vocational fitness by means of psychological tests.* New York: Harper & Row.

Super, D. E. (1953). A theory of vocational development. *American Psychologist, 8,* 185–190.

Super, D. E. (1955). The dimensions and measurement of vocational maturity. *Teachers College Record, 57,* 151–163.

Super, D. E. (1957). *The psychology of careers.* New York: Harper & Row.

Super, D. E. (1963). Self-concepts in vocational development. In D. E. Super, R. Starishevsky, N. Matlin, & J. P. Jordaan, *Career development: Self-concept theory* (pp. 1–16). Princeton, NJ: College Entrance Examination Board.

Super, D. E. (1981). A developmental theory: Implementing a self-concept. In D. H. Montross & C. J. Shinkman (Eds.), *Career development in the 1980s: Theory and practice* (pp. 28–42). Springfield, IL: Thomas.

Super, D. E. (1984). Career and life development. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (pp. 192–234). San Francisco: Jossey-Bass.

Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development: Applying contemporary theories to practice* (2nd ed., pp. 197–261). San Francisco: Jossey-Bass.

Super, D. E. (1992). Toward a comprehensive theory of career development. In D. H. Montross & C. J. Shinkman (Eds.), *Career development: Theory and practice* (pp. 35–64). Springfield, IL: Thomas.

Super, D. E. (1994). A life-span, life-space perspective on convergence. In M. L. Savickas & R. W. Lent (Eds.), *Convergence in career development theories* (pp. 63–76). Palo Alto, CA: CPP Books.

Super, D. E., & Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems. *British Journal of Guidance and Counseling, 9,* 194–201.

Super, D. E., Savickas, M. L., & Super, C. M. (1996). The life-span, life-space approach to careers. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 121–178). San Francisco: Jossey-Bass.

Super, D. E., Thompson, A. S., & Lindeman, R. H. (1988). *Adult Career Concerns Inventory: Manual for research and exploratory use in counseling.* Palo Alto, CA: Consulting Psychologists Press.

Swanson, J. L. (1992). Vocational behavior, 1989–1991: Life-span career development and reciprocal interaction of work and nonwork. *Journal of Vocational Behavior, 41,* 101–161.

Thompson, A. S., Lindeman, R. H., Super, D. E, Jordaan, J. P., & Myers, R. A. (1984). *Career Development Inventory: Technical manual.* Palo Alto, CA: Consulting Psychologists Press.

Underwood, B. J. (1957). *Psychological research.* New York: Appleton-Century-Crofts.

Vondracek, F. W., & Kawasaki, T. (1995). Toward a comprehensive framework for adult career development theory and intervention. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology* (2nd ed., pp. 111–141). Hillsdale, NJ: Erlbaum.

Woodworth, R. S. (1918). *Dynamic psychology.* New York: Columbia University Press.