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Vocational behavior and development in times of social change: new perspectives for theory and practice

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Abstract A review of new and emerging conceptions of work and career is complemented by a description of a comprehensive systems framework that avoids many of the dichotomies found in current accounts of career development and intervention. This is followed by a description of Ford and Smith's (Educational Psychologist 42(3):153–171, 2007) "thriving with social purpose" framework, which is offered as a potentially more inclusive approach to intervention than that based on the meta-theoretical framework of social constructivism.

Résumé Comportement et développement vocationnel en période de changement social : nouvelles perspectives pour la théorie et la pratique. Une revue de nouvelles et émergeantes conceptions du travail est complétée par une description d'un cadre conceptuel compréhensif en termes de systèmes qui évite de nombreuses dichotomies que l'on trouve dans les contributions actuelles du développement et de l'intervention de carrière. Ceci est suivi par une description du cadre «prospérité dans un but social» de Ford et Smith (Educational Psychologist 42(3):153–171, 2007), qui est offert comme une approche potentiellement plus inclusive face aux interventions que celle basée sur le cadre méta-théorique du constructivisme social.

Zusammenfasung Laufbahn Verhalten und Entwicklung in Zeiten des sozialen Wandels: Neue Perspektiven für Theorie und Praxis. Eine Übersicht über neue und aufkommende Konzepte von Arbeit und Laufbahn wird durch eine Beschreibung von einem umfassenden systemischen Rahmenmodell ergänzt, welches viele der Dichotomien in den gegenwärtigen Beschreibungen von Laufbahnentwicklung und

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Interventionen vermeidet. In der Folge wird das Rahmenmodell „thriving with social purpose [Gedeihen mit sozialer Zielsetzung]“ von Ford und Smith (Educational Psychologist 42(3):153–171, 2007) beschrieben, welches als ein potentiell umfassenderen Ansatz für Interventionen präsentiert wird als das Modell, welches auf dem meta-theoretischen Rahmenmodell des sozialen Konstruktivismus basiert.

Resumen **Conducta Vocacional y Desarrollo en Tiempo de Cambio Social: Nuevas Perspectivas Teóricas y Prácticas**. Una revisión las nuevas y emergentes concepciones de trabajo se complementan por una descripción del contexto de los sistemas comprensivos que evita muchas dicotomías que se encuentran en las contribuciones actuales en el desarrollo e intervención de la carrera. Esto se puede ver en una descripción de Ford y Smith (Educational Psychologist 42(3):153–171, 2007) “prosperidad con un propósito social”, donde se ofrece como un acercamiento potencialmente más inclusivo frente a la intervención basada en un marco meta-teórico del constructivismo social.

Keywords Social purpose · Systems · Intervention

Satisfying and effective participation by individuals in the world of work is a cornerstone for both a high quality personal life and a successful society. For individuals it can be a source of economic well being, pleasure in personal accomplishment, friendships, personal identity, and participation in the larger community context. Despite its importance, serious major and programmatic scholarly efforts to understand the personal and social dynamics of vocational behavior and development within their multiple contexts have been episodic and limited. Moreover, a rapidly accelerating rate of change and diversity of both individual and social dynamics make a deeper understanding of these issues essential, more complicated, and urgent. What is needed is a comprehensive and dynamic theoretical framework that encompasses all aspects of human development, including the critically important area of human development and work. This would need to be complemented by a framework for intervention that recognizes the central location of vocational development in positive human development.

To begin our discussion of these needs, we provide some historical perspectives and follow this with a description of some emerging theoretical perspectives that conceptualize vocational behavior and development within the broader framework of human development-in-context. The concluding section describes Ford and Smith’s (2007) “thriving with social purpose” (TSP) framework, which defines the major parameters of an intervention approach that is consistent with such a comprehensive theoretical framework and could be employed to promote vocational development as part of an effort to foster optimal human functioning.

Historical perspective

Throughout human history, work has been part of human existence, although the importance and meaning of work have varied greatly depending on many factors,

most notably among them culture and historical time. For thousands of years, work in primitive societies has consisted of doing things necessary to obtain food and shelter and to secure survival. For many centuries, Judeo-Christian tradition has viewed work as a means to obey and associate oneself with the work of the Creator (Riverin-Simard, 1991). Paid work as we know it today emerged with the industrial revolution and has persisted through the post-industrial world into the age of technology and what has been described as a post-modern era (e.g., McMahon & Watson, 2007; Savickas, 1993). It is undeniable that many changes have occurred since the early days of the industrial revolution. The conditions of paid work have improved almost everywhere across the globe, although further improvement is still urgently needed in some areas. The nature of work itself has changed with increased access to tools and machines that reduce reliance on hard physical labor and with the pervasive influence of computers and information technology. At the same time, the uneven distribution of the benefits of work, including the privilege of choosing one's occupation, has persisted (Blustein, 2006).

The study of work and of workers has also changed with the times (for a review, see Savickas & Baker, 2005). In the United States, in particular, there were only fragmentary, limited theoretical and research efforts in this domain during the first half of the 20th century. However, the post World War II impact in the United States of a massive number of people returning from war time service to enter the domestic world of work stimulated recognition of the need for a stronger relevant knowledge base. Most current formulations have their theoretical and empirical roots in the burst of scholarly work between 1940 and 1970. Toward the end of this period, Crites (1969) subtitled his seminal book on vocational psychology "The Study of Vocational Behavior and Development." At that time, he stated that relevant theory and research findings had resulted in disparate and unintegrated results spread over several disciplines. He emphasized the need "to further the development of vocational psychology as a science by clarifying what is known and by identifying what is not known" (Crites, 1969, p. x). Much of the research since then has largely been a further investigation and elaboration of those initial ideas using traditional research methods, producing results with very limited and circumscribed impact (Tinsley, 2001).

During the past decade, a number of noteworthy efforts have been put forth to remedy the moribund state of vocational psychology. For example, Savickas (2000) suggested that vocational psychology needs to be "renovated" and grow beyond its traditional roots to respond to the global economy and the changing structure of work. Similarly, Van Esbroeck (2007) argued that the "psychology" of workers and the occupational environment has changed so much that models and paradigms that have served vocational psychology in the past are no longer adequate. Blustein (2006) took the position that "traditional" vocational psychology has tended to focus on a small, privileged population of individuals who have the luxury of making choices and working not just for economic and physical survival but for fulfillment and self-realization. Among other things, he proposed an "inclusive" way of thinking about work in people's lives: "My position is that work is central to understanding human behavior and the context that frames life experience" (Blustein, 2006, p. 2).

Several "new" ways of thinking about work and careers have been proposed to address globalization and the changed nature of work. A common theme in most of

these new ways of thinking has been the assertion that post-industrial, post-modern conditions have led to the virtual elimination of job security for workers and a significant curtailment of previously common expectations about career advancement with increasing experience and seniority (e.g., Coutinho, Dam, & Blustein, 2007; Savickas, 2000). The concept of the "protean" career was introduced to describe a situation in which companies no longer have a commitment to their workers, while workers, in turn, have no commitment to companies, and their careers are essentially self-directed ventures driven by the individual's goals and values (Briscoe & Hall, 2006; Hall, 2004). A related concept, the "boundaryless career," described circumstances in which individuals create a meaningful career through their connections with others who have similar interests and competencies, but not through the more traditional means of a sense of belonging to a particular organization or subscribing to a particular organizational culture (Arthur & Rousseau, 1996; DeFillippi & Arthur, 1994).

Terms such as "post-modern," "protean," and "boundaryless," when combined with "career," offer useful descriptions of changed circumstances. They reflect the fact that social structures and conventions that used to channel individuals into clearly defined occupational pathways have changed or disappeared altogether creating a degree of individualization that was previously unheard of. Nevertheless, social structures still exist that serve to somewhat constrain and channel individuals into particular educational or training pathways, even though they may be much more varied, variable, and unpredictable than was previously the case. The new labels that have become quite popular do little, however, to satisfy our scientific curiosity about processes of change and development that produce these new types of careers and career pathways.

Emerging transformations in theoretical models

One possible way of addressing the changed realities of post-industrial societies is the framework of social constructionism. Thus, Blustein (2001) argued that "postmodern and constructionist analyses would be well-suited for the more challenging tasks of developing new and relevant ideas about the psychological nature of working" (p. 178). Savickas (2000) concluded that postmodern careers have to be more personal and self-directed and that "the emphasis on personal meaning and becoming an agent in one's own life draws inspiration and support from constructivist metatheory" (p. 59). Accordingly, Savickas (2002, 2005) introduced his theory of career construction to explain "the interpretive and interpersonal processes through which individuals impose meaning and direction on their vocational behavior" (Savickas, 2005, p. 42). He made a distinction between social constructionism (e.g., Gergen, 1999) and personal constructivism through which "individuals construct their careers by imposing meaning on their vocational behavior and occupational experiences" (Savickas, 2005, p. 43). Guichard (2005) proposed another constructivist approach, wherein he posited that individuals are continuously engaged in self-reflection, and they construct themselves and their identity in relation to the various contexts with which they interact and in relation to

identity offers available in a given society. Although Guichard's model is not focused specifically on career construction, he acknowledged that self-construction for most individuals in industrialized societies includes career construction. Richardson (1993, 2004) argued a similar position concerning the impact of work in people's lives, and its relational dimension.

Another theoretical approach that uses social constructionism is the contextual action theory of career and counseling (Valach & Young, 2004; Young & Valach, 2008; Young, Valach, & Collin, 2002). "In this contextualist action theory explanation of career, action is conceptualized as being cognitively and socially regulated and steered. It is organized as a system … " (Valach & Young, 2004, p. 65). Career is viewed as a construction produced through individuals' goal directed action. A particular strength of this approach is its effort to closely connect theory, practice, and research.

There are many reasons to applaud efforts to revitalize vocational psychology in response to post-modern conditions in much of the industrialized world. A more explicit connection between theory and practice is one theme that is apparent throughout the writings of post-modern theorists. Moreover, the renewed focus on the individual-in-context (see also, Vondracek, Lerner, & Schulenberg, 1986) is particularly welcome, especially in vocational guidance and career interventions of all kinds, where psychometric assessments were sometimes driving the agenda, rather than individual persons in all their complexity, operating in a multitude of diverse environments. Nevertheless, the current popularity of post-modern approaches must raise concerns about a concurrent de-emphasis of rigorous, theory-driven, empirical research and the resulting threats to vocational psychology as a legitimate science. For example, Blustein (2006) suggested that it would be appropriate to abandon the search for universal truths with a more relativistic assessment of human functioning. Such concerns are warranted in spite of the fact that some post-modern theoreticians have clearly stated that they see post-modern approaches (e.g., constructivism) as complementary to empirical, positivistic approaches (e.g., Savickas, 2000).

Individuals as self-constructing, self-regulating, self-organizing, living systems

We propose that vocational psychologists and practitioners do not need to choose between post-modern, constructivist approaches on the one hand, and empirical, positivist approaches on the other. They also do not need to choose between theory and practice, qualitative versus quantitative research or a focus on the individual versus the environment (Van Esbroeck, 2007). Writing about contemporary developmental science (but equally applicable to vocational psychology), Lerner and Overton (2008) described such conceptual splitting as a now obsolete way of thinking on the road to more advanced conceptualizations that promote understanding of mutually influential individual-context relations. Moreover, they noted that the ubiquitous potential for change in individual-context relations makes the distinction between basic and applied particularly unnecessary because what researchers need to do is "to assess whether specific, theoretically predicated

relations between the individual and the context optimize the likelihood of positive development" (Lerner & Overton, 2008, p. 247).

Thoughtful vocational guidance counselors will agree that the core mission of their interventions is to promote positive development. The obvious question is whether there is a theoretical framework that can effectively eliminate the dichotomies decried by Van Esbroeck (2007) and foster our understanding of what it takes to successfully promote positive (vocational) development. Constructivist approaches with their central focus on meaning making (cf. Van Esbroeck, 2007) are likely to produce only an incomplete understanding of the processes involved in dynamic person-context relations that optimize positive vocational development. Moreover, abandoning the idea that *development* is a critically important construct necessary for a complete understanding of how individuals relate to their various contexts represents a serious omission in most of the constructivist approaches. It may be useful to remember that Osipow (1983), a keen observer of trends in vocational psychology, predicted that the best chance for theory development in vocational psychology would be within the larger context of human development. Most importantly, contributors to constructivist approaches have often presented two world views or paradigms that are used in vocational psychology, those being the dominant "traditional positivistic" approach on the one hand, and constructivist approaches on the other. In recent decades, however, an alternative model of the organization and dynamics of diverse phenomena has been emerging (e.g., in biology, physics, genetics, biochemistry, neurology & human development), requiring different and new methodologies. Collectively, they are sometimes termed the *sciences of complexity*. This progressive transformation in thinking has stimulated an explosion of fundamentally important new theory, knowledge and research methods relevant to all aspects of human and social development. This cutting edge in science is opening up new possibilities and revealing that ideas dominant in the mid 1950s are significantly outdated. Morin (1994, 2008) baptized these trends as the epistemological "paradigm of complexity" (Morin, 2008, p. 6). Damasio (1994) and other historical precedent authors such as Varela and Maturana (1980) addressed similar concerns.

Ideas generated by the sciences of complexity are beginning to find expression in the cutting edge of vocational development theory. One of the early manifestations of this emergence was a book based on a developmental contextual model, "Career Development: A Life Span Developmental Approach" (Vondracek et al., 1986). Since then, others have begun to value more complex models (e.g., Patton & McMahon, 1999, 2006). Moreover, over the past two decades, Vondracek and his colleagues (e.g., Vondracek & Kawasaki, 1995; Vondracek & Porfeli, 2002, 2008) have begun to combine the seeds planted in the 1986 book with new dynamic systems models of human development (Ford, 1987; Ford, 1992; Ford & Lerner, 1992) and with advances in developmental science that focus on key processes in dynamic person-context interactions (e.g., Baltes, 1997; Baltes, Lindenberger, & Staudinger, 1998; Lerner, Theokas, & Jelicic, 2005).

These ideas are beginning to attract the interest of other scholars in the vocational behavior and development field (e.g., Patton & McMahon, 1999, 2006), but some are still a little disconcerted by the more complex models of vocational development

as contrasted with the much simpler models created in the 1950s. It is beyond the scope of this paper to detail the differences between the emerging dynamic systems models of vocational development and the prominent developmental theories of the past, but a few examples may suffice. Using the developmental-contextual framework, Schoon and Parsons (2002) observed that development is conceptualized as the dynamic interaction between a changing (developing) individual embedded in a changing context. Development in Schoon and Parson's framework is unlike that in Super's (1980) life-span, life-space approach, which took the individual as its focal point of interaction, or in Gottfredson's (1981) developmental theory of occupational aspirations, which emphasized the effects of personal factors in career choices. Another important feature of the more recent dynamic systems models is that they can accommodate and account for different historical contexts that can profoundly alter the circumstances surrounding the developing person. The developing individual is thus portrayed as being embedded in an interconnected set of contexts, including the immediate social and material setting in which he or she is situated, but also including his or her social class, parents' workplace, and cultural or societal norms and customs in which the individual is not an active participant in the setting.

Conceptualizing individuals as self-constructing, self-regulating, and self-organizing living systems that function in multiple contexts eliminates the need to construct a different theory for males and females, for privileged and underprivileged, or for individuals who live in different countries (Vondracek & Fouad, 1994). The different economic, political, and socio-cultural conditions that are integral parts of their experience are properly recognized because the unit of analysis is the individual-in-context, making preconceived notions of what is good and what is not, both irrelevant and unnecessary. If the goal is to optimize positive development, scientist-practitioners must strive to align the strengths in any given individual with the resources for positive development present in the individual's contexts—as both individual and contexts change. Understanding and enhancing such alignment clearly places developmentalists (and vocational counselors) in the key settings of human development, such as the family, school, and community (Lerner & Overton, 2008). Moreover, interventions designed from this perspective may be focused on the individual, on any one or several pertinent contexts, or on any combination thereof.

Adoption of this approach would transcend traditional disciplinary boundaries and create diverse roles for vocational counselors and scientists. Perhaps most importantly, depending on the socio-cultural context within which they operate, they could become agents of social change who focus on conducting theory-predicated tests of how best to foster positive (vocational) development and, at the same time, foster social justice (Lerner & Overton, 2008). Counselors who embrace this broadened perspective would have an opportunity to extend their impact on the people they serve and on the communities that they call home. In the next section we will outline the key features of an intervention strategy that is based on a theoretical framework that describes individuals as self-constructing, self-regulating and self-organizing living systems (Ford, 1987).

The design of vocational interventions: thriving with social purpose

The welcome current focus on an inclusive "psychology of working" (cf. Blustein, 2001, 2006), has served to enhance the desire of vocational psychologists to serve not only middle-class individuals who have a wide variety of options for optimizing their careers, but also to attend to those who are less fortunate and thus socially excluded by virtue of who they are, where they are, or some combination thereof. Serving such a broad range of individuals often involves helping them to overcome hopelessness and lack of motivation based on a perceived lack of opportunities and power, as well as perceived personal inadequacies and lack of confidence.

One excellent example of a possible approach is the TSP framework that was developed by Ford and Smith (2007). Ford and Smith posited that optimal functioning can be promoted by enhancing or reconfiguring the person-in-context system by transforming motivational patterns that are developmentally limiting and effective for only a limited range of goals and contexts into motivational patterns that generatively fuel exploration and competence development, which are effective for a much broader range of goals and contexts (Ford & Smith, 2007, p. 160). Of course, optimal human functioning can be promoted in multiple ways, including facilitating gains in knowledge and skills and making meaningful improvements in the available opportunities and resources. However, the most efficient and powerful pathway to optimal human functioning is through the *integrated amplification* of personal goals, emotions, and personal agency beliefs (Ford, 1992).

The focus on personal goals, emotions, and personal agency beliefs may be misinterpreted to suggest an individualistic focus to the exclusion of, for example, group goals in collectivist cultures. In fact, personal goals may (and usually do) include what Ford (1992) called "integrative social relationship goals" (p. 89), such as seeking belongingness, social responsibility, social justice, connectedness, and supporting others. Furthermore, the inclusion of emotions in a framework designed to understand and foster positive development is particularly important and novel in view of the fact that the role of emotions (in vocational development) is usually ignored or reduced to a footnote. Finally, we underscore that Ford and Smith's (2007) use of the construct of personal agency beliefs is aligned with Bandura's (1986) construct of self-efficacy beliefs because personal agency beliefs incorporate both, a person's beliefs about their capabilities and corresponding beliefs about the contexts that are relevant to those beliefs. Although Bandura stressed that self-efficacy beliefs should be considered in relation to specific contexts, this caution has often been ignored. With these considerations as background, we summarize the essential features of Ford and Smith's TSP framework, in the hope that professionals in the field of vocational guidance will find some of these ideas not only inspiring but useful in their work.

Amplification in motivational systems

There is a growing body of research that supports the notion that mutually reinforcing patterns of goals, personal agency beliefs, and emotions can have a powerful motivating effect that causes individuals "to invest themselves in new

challenges and opportunities rather than adopt a stagnant or defensive posture" (Ford & Smith, 2007, p. 160). To support their claim, Ford and Smith cited research from Frederickson and Losada (2005) and Fazio, Eiser, and Shook (2004). Frederickson & Losada (2005) presented persuasive empirical evidence to support the notion that the amplification of positive emotions, although often transient, produced lasting personal resources: Positive emotions expanded the array of thoughts and actions called forth in any given situation, in contrast with negative emotions, which narrowed people's behavioral tendencies. Fazio et al. (2004) expounded on the link between interest and exploration to demonstrate that approaching a situation with positive attitudes—like being interested and curious—produced more accurate subsequent knowledge than approaching a situation with negative attitudes—like being bored and cynical. In short, being positive led to approach and exploration behaviors that created experiential learning opportunities that confirmed or corrected initial expectations, while being negative promoted avoidance and missed opportunities to correct false impressions (Frederickson & Losada, 2005, p. 679). Citing findings from previously reported research (Frederickson, 2000), Frederickson and Losada (2005) emphasized that in the pursuit of "human flourishing," positive human emotions must be "meaningfully grounded in the reality of current circumstances" (p. 685) and they must be genuine and not feigned. Human flourishing is an outcome that is quite similar to what Ford and Smith called a "*thriving* pattern" (p. 161) and amplified motivational functioning produced this pattern by facilitating productive engagement with relevant contexts and steady progress toward achieving personal goals.

Active approach goal orientation

One of the cornerstones of "thriving" is what Ford and Smith called an "active approach goal orientation" (p. 161). They described it as including (1) clear understanding of personal goals (current and emerging); (2) ability to stay focused on those goals; (3) willingness to explore alternatives and take risks when needed; (4) persistent bias toward action orientation; (5) avoidance of getting bogged down in evaluative thoughts and feelings, and (6) avoidance of having circumstances dictate options and opportunities. The resulting behaviors promoted being engaged with a wide variety of people and tasks, which, in turn, facilitated "continuous self-improvement and the discovery of new opportunities" (Ford & Smith, 2007, p. 161).

Personal optimism

Another aspect of a thriving pattern is referred to as personal optimism. Ford and Smith (2007) defined personal optimism as "fundamental trust in one's ability to make progress toward meaningful goals through appropriate effort" (p. 162). Research suggests that an important dynamic in developing this characteristic is to have a positive expectation of future goal attainment coupled with a realistic perception of current circumstances.

Mindful tenacity

An active approach goal orientation and personal optimism are representative of the internal psychological processes that are required for a thriving pattern. However, context beliefs also play an important role in determining the motivational status of the person. Context beliefs are amplified in a positive way (and thus represent mindful tenacity) when they are based on a realistic assessment of circumstances that is coupled with a persistent belief that important personal goals can and will be achieved in the future. According to Ford and Smith (2007), two interrelated processes are necessary to create this enhanced state: (1) imagining the environmental resources, supports, and responses needed to make progress toward the goal, and (2) continuously monitoring the extent to which these conditions actually exist. Because the contexts in which most people live and work, and therefore pursue their goals, are at best inconsistently supportive and facilitative (and sometimes even unsupportive), persistence requires creativity in seeking alternative pathways to important goals.

Emotional wisdom

Emotional wisdom represents the ability to invest just the right amount of emotional energy in daily activities designed to achieve core personal goals. Although negative emotions are appropriate in some situations, the trick is to ensure that one does not "get stuck" in a negative emotional state. Instead, what is most facilitative of optimal functioning is a "usual state" or automatic functioning that involves positive emotions such as interest, affection, and gratitude. One consequence of operating in this fashion is growth in personal (motivational) resources and social support.

Social purpose

It should be readily apparent that empathy is particularly useful in promoting those aspects of effective functioning that involve the person's identity as a member of a larger social system. Individuals who care for others and care about others tend to have integrative social goals, while those who do not, tend to be self-absorbed, hedonistic, hypermasculine (macho), and pragmatic-defensive. In summary, individuals who are "thriving with social purpose" are characterized by an active orientation supported by personal optimism, mindful tenacity and personal wisdom, and focused on goals that serve a social purpose, especially those including social relationships.

Although the TSP framework was originally designed to guide the design of interventions in education (e.g., classrooms and whole school systems), the vocational guidance implications of adopting such a comprehensive and integrative approach to optimal human functioning are potentially far-reaching. In fact, many current efforts in vocational guidance incorporate pieces of the TSP approach. What is particularly appealing about this approach, however, is its comprehensiveness

and encouragement to look at the "big picture" (Ford & Smith, 2007, p. 165). Individuals are seldom pursuing single goals (such as finding a suitable occupation or landing a job). Considering a strategy for helping individuals to optimize their goal attainment across a range of goals (including career goals) is likely to be more effective than to ignore non-career-related goals. Thus, the objective of vocational guidance could be conceptualized as being focused on the whole person-in-context with a particular emphasis on optimal functioning in the areas of vocational development.

The foregoing discussion should make it self-evident that interventions to promote thriving with social purpose cannot be conceived as simple, time-limited interventions focused on the individual. Developmental-contextual and systemic models identify the person-in-context as the proper unit of analysis, and hence the proper unit that needs to be addressed by interventions. Moreover, there is a growing literature on the regulation of person-context relations that focuses on the mutual effects of person on context and context on person (e.g., Brandtstädter, 1998, 1999; Elder, 1998; Lerner, 2002; Lerner, Dowling, & Anderson, 2003). In a well-functioning person-context system, the person acts to support the institutions of society because the institutions of society are seen as simultaneously supporting the healthy and productive functioning of the individual.

Conclusion

We have attempted to retrace some of the historical antecedents of the current state of vocational psychology as a science and a profession. Unprecedented changes have occurred due to technology and globalization that have resulted in important efforts to reform vocational psychology to make it more responsive to the changed social, economic, and cultural landscape of the twenty-first century (Palladino Schultheiss, 2007). Perhaps most importantly, leaders in the field have embraced post-modern influences that include self-construction, interconnectedness, context, subjectivity, and narrative, while questioning the appropriateness of using empirical methodologies associated with a positivist worldview (McMahon & Watson, 2007). We suggest that a developmental-contextual world view, actualized in sophisticated, integrative, dynamic conceptualizations of humans as self-constructing, self-organizing, and self-regulating living systems represents a more complete framework for dealing with post-modern realities than some of the more recently suggested advances. To demonstrate the utility of this framework for meaningful intervention, we relied extensively on the recently published work of Ford and Smith (2007), which described their approach to the development of optimal human functioning. We believe that career interventions, in general, and educational and vocational guidance, in particular, could benefit from a close examination of this approach as a complement to the predominant current emphasis on "new" paradigms based on the meta-theoretical framework of social constructionism.

References

Arthur, M. B., & Rousseau, D. (Eds.). (1996). *The boundaryless career: A new employment principle for a new organizational era*. Oxford, UK: Oxford University Press.

Baltes, P. B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist, 52*, 366–380.

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1998). Life-span theory in developmental psychology. In R. M. Lerner (Ed.), *Theoretical models of human development* (5th ed., Vol. 1, pp. 1029–1143). New York, NY: Wiley.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Blustein, D. L. (2001). Extending the reach of vocational psychology: Toward an inclusive and integrative psychology of working. *Journal of Vocational Behavior, 59*, 171–182.

Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Mahwah, NJ: Lawrence Erlbaum Associates.

Brandtstädter, J. (1998). Action perspectives on human development. In W. Damon (Series Ed.) & R. M. Lerner (Volume Ed.), *Handbook of child psychology: Vol. 1, Theoretical models of human development* (5th ed., pp. 807–863). New York, NY: Wiley.

Brandtstädter, J. (1999). The self in action and development: Cultural, biosocial, and ontogenetic bases of intentional self-development. In J. Brandstädter & R. M. Lerner (Eds.), *Action and self-development: Theory and research through the life-span* (pp. 37–65). Thousand Oaks, CA: Sage.

Briscoe, J. P., & Hall, D. T. (2006). The interplay of boundaryless and protean careers: Combinations and implications. *Journal of Vocational Behavior, 69*, 4–18.

Coutinho, M. T., Dam, U. C., & Blustein, D. L. (2007). The psychology of working and globalization: A new perspective for a new era. *International Journal of Educational and Vocational Guidance, 8*, 5–18.

Crites, J. O. (1969). *Vocational psychology: The study of vocational behaviour and development*. New York, NY: McGraw-Hill.

Damasio, A. (1994). *Descartes' error: Emotion, reason and the human brain*. New York, NY: G. P. Putnam.

DeFillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competency-based perspective. *Journal of Organizational Behavior, 15*, 307–324.

Elder, G. H. Jr. (1998). The life course and human development. In W. Damon (Series Ed.) & R. M. Lerner (Volume Ed.), *Handbook of child psychology: Vol. 1, Theoretical models of human development* (5th ed., pp. 939–991). New York, NY: Wiley.

Fazio, R. H., Eiser, J. R., & Shook, N. J. (2004). Attitude formation through exploration: Valence asymmetries. *Journal of Personality and Social Psychology, 87*, 293–311.

Ford, D. H. (1987). *Humans as self-constructing living systems: A developmental perspective on behavior and personality*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Ford, M. E. (1992). *Motivating humans: Goals, emotions, and personal agency beliefs*. Newbury Park, CA: Sage Publications.

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

Ford, M. E., & Smith, P. R. (2007). Thriving with social purpose: An integrative approach to the development of optimal human functioning. *Educational Psychologist, 42*(3), 153–171.

Frederickson, B. L. (2000). Extracting meaning from past affective experiences: The importance of peaks, ends, and specific emotions. *Cognition and Emotion, 14*, 577–606.

Frederickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist, 60*, 678–686.

Gergen, K. (1999). Agency: Social construction and relational action. *Theory and Psychology, 9*, 13–15.

Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology, 28*, 545–579.

Guichard, J. (2005). Life-long self-construction. *International Journal of Educational and Vocational Guidance, 5*, 111–124.

Hall, D. T. (2004). The protean career: A quarter-century journey. *Journal of Vocational Behavior, 65*, 1–13.

Lerner, R. M. (2002). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Erlbaum.

Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development: Thriving as a basis of personhood and civil society. *Applied Developmental Science, 7*, 172–180.

Lerner, R. M., & Overton, W. F. (2008). Exemplifying the integration of the relational developmental system: Synthesizing theory, research, and application to promote positive development and social justice. *Journal of Adolescent Research, 23*(3), 245–255.

Lerner, R. M., Theokas, C., & Jelicic, H. (2005). Youth as active agents in their own positive development: A developmental systems perspective. In W. Greve, K. Rothermund, & D. Wentura (Eds.), *The adaptive self: Personal continuity and intentional self-development* (pp. 31–47). Cambridge, MA: Hogrefe & Huber Publishers.

McMahon, M., & Watson, M. (2007). An analytical framework for career research in the post-modern era. *International Journal of Educational and Vocational Guidance, 7*, 169–179.

Morin, E. (1994). *La complexité humaine. [Human complexity]*. Paris, France: Flammarion.

Morin, E. (2008). *On complexity*. Cresskill, NJ: Hampton Press.

Osipow, S. (1983). *Theories of career development* (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Palladino Schultheiss, D. E. (2007). Introduction to the thematic issue: New methods and emerging paradigms in vocational psychology. *International Journal of Educational and Vocational Guidance, 7*, 145–147.

Patton, W., & McMahon, M. (1999). *Career development and systems theory: A new relationship*. Pacific Grove, CA: Brooks/Cole.

Patton, W., & McMahon, M. (2006). *Career development and systems theory: Connecting theory to practice* (2nd ed.). Rotterdam, The Netherlands: Sense Publishers.

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

Richardson, M. S. (2004). The emergence of new intentions in subjective experience: A social/personal constructionist and relational understanding. *Journal of Vocational Behavior, 64*, 485–498.

Riverin-Simard, D. (1991). *Careers and social class*. Montréal, Canada: Meridian Press.

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

Savickas, M. L. (2000). Renovating the psychology of careers for the twenty-first century. In A. Collin & R. Young (Eds.), *The future of career* (pp. 53–68). Cambridge, UK: Cambridge University Press.

Savickas, M. L. (2002). Career construction: A developmental theory of vocational behaviour. In D. Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 149–205). San Francisco, CA: Jossey-Bass.

Savickas, M. L. (2005). The theory and practice of career construction. In R. W. Lent & S. D. Brown (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42–70). Hoboken, NJ: Wiley.

Savickas, M. L., & Baker, D. B. (2005). The history of vocational psychology: Antecedents, origin, and early development. In W. B. Walsh & M. L. Savickas (Eds.), *Handbook of vocational psychology* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Schoon, I., & Parsons, S. (2002). Teenage aspirations for future careers and occupational outcomes. *Journal of Vocational Behavior, 60*, 262–288.

Super, D. E. (1980). A life-span, life-space, approach to career development. *Journal of Vocational Behavior, 16*, 282–298.

Tinsley, H. E. A. (2001). Marginalization of vocational psychology. *Journal of Vocational Behavior, 59*, 243–251.

Valach, L., & Young, R. A. (2004). Some cornerstones in the development of a contextual action theory of career and counselling. *International Journal for Educational and Vocational Guidance, 4*, 61–81.

Van Esbroeck, R. (2007). A new disciplinary home for vocational psychology: A house with many rooms. *International Journal of Educational and Vocational Guidance, 7*, 203–206.

Varela, F., & Maturana, H. (1980). *Autopoiesis and cognition: The realization of the living*. Boston, MA: Reidel.

Vondracek, F. W., & Fouad, N. A. (1994). Developmental contextualism: An integrative framework for theory and practice. In M. Savickas & R. Lent (Eds.), *Convergence in theories of career choice and development* (pp. 205–212). Palo Alto, CA: Consulting Psychologists Press.

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: Lawrence Erlbaum Associates.

Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1986). *Career development: A life-span developmental approach*. Hillsdale, NJ: Erlbaum Associates.

Vondracek, F. W., & Porfeli, E. J. (2002). Life-span developmental perspectives on adult career development: Recent advances. In S. G. Niles (Ed.), *Adult career development: Concepts, issues, and practices* (3rd ed., pp. 23–40). Tulsa, OK: National Career Development Association.

Vondracek, F. W., & Porfeli, E. J. (2008). Social contexts for career guidance throughout the world: Developmental-contextual perspectives on career across the lifespan. In J. A. Athanasou & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 209–225). Dordrecht, The Netherlands: Springer Science and Business Media B.V.

Young, R. A., & Valach, L. (2008). Action theory: An integrative paradigm for research and evaluation in career. In J. A. Athanasou & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 643–657). Dordrecht, The Netherlands: Springer Science and Business Media B.V.

Young, R. A., Valach, L., & Collin, A. (2002). A contextual explanation of career. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 477–552). San Francisco, CA: Jossey-Bass.