
Interests: A Critical Domain of Psychological Diversity

Vocational Interests: Meaning, Measurement, and Counseling Use

by Mark L. Savickas and Arnold R. Spokane (Eds.)

Palo Alto, CA: Davies-Black/Counseling Psychologists Press, 1999. 434 pp. ISBN 0-89106-126-6. \$49.95

Review by David Lubinski

On the 90th anniversary of Frank Parsons's (1909) landmark, *Choosing a Vocation*, Savickas and Spokane published a spectacular contribution to the vocational interest literature. A second historical marker is that this review is being written in Peabody's Department of Psychology and Human Development of Vanderbilt University whose first chair (1915) was E. K. Strong, the most important figure in interest measurement of the 20th

century. Opening with these two giants is appropriate, because this edited volume would please both of them. It includes an excellent over-

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view of interest measurement and research during the past century, crafted by leaders in the field; and, among other things, it speaks to why this domain of psychological diversity (individual differences) is one of psychology's success stories. In the concluding chapter, Borgen is correct in speculating that this volume stands a good chance of becoming among the most important books on vocational interests (p. 384).

There are few things more important in life than adjustment to work. Contemporary trends in the world of work reflect a highly fluid, ever-changing dimensionality; an intense whitewater of innovation and opportunity. Given this, the importance of "knowing oneself" in terms of capabilities and motives becomes even more essential than before for one's general psychological well-being. To become self-insightful, insightful about choosing opportunities for positive development in educational and vocational settings, the personal-attribute dimensions covered by Savickas and Spokane are critical. Omitting from consideration these qualities of human individuality would drastically compromise a full appreciation of key personal attributes guiding development toward vocational choice—as well as antecedents to such choices (educational decision making). These modern advances will help educators, counselors, and industrial psychologists immensely in working with students, clients, and personnel in making more informed decisions about learning and work environments—that is, finding promising opportunities for fostering positive development. This is accomplished by orchestrating congruencies between the defining features of psychological niches (affordances) and salient features of individuality (distinguishing personal attributes).

Future researchers wishing to contribute to this area need to read this book. It provides a wide-angled view of one of the most important components of Parsons's (1909, p. 5) first (of three) considerations found in his outline for a wise vocational choice:

"a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes."

Content and Reactions

Following the Introduction by Savickas and Spokane, the book is parsed into four sections: Conceptualizing Vocational Interests, measurement, uses in career interventions, and what we know and future directions. All of the chapters are recommended, but some are so impressive that they need to be singled out. For example, Savickas's chapter on the psychology of interests is an encyclopedic tour de force. It places interests in such a broad psychological context (and does it so well) that it is destined to be on graduate syllabi for years. Anyone interested in a historical review of the psychological essence of interests will find this chapter invaluable; I have read it twice, and I know I will read it again.

Next, Gottfredson does the field a service; she shows how biometrically informed designs uncover causal paths from overlapping patterns of covariation. Her chapter should be read not only by those interested in the development of vocational interests, but also by those interested in the development of other personal attributes (affective, cognitive, and conative). Readers will learn how to avoid conflating endogenous and exogenous causal streams, which is still a problem in spite of powerful methodological tools being available for many years (Bouchard, 1997). I found her conjectures about aspects of self-understanding "listening for the whispers of that genetic substrate" (p. 81) to be intriguing, inasmuch as it (upon reflection) seems to covary highly with a familiar saying in counseling psychology: "Be true to yourself." I suspect that other biological variables mediate the patterns of covariation reviewed by Gottfredson, such as the hormonal determinants discussed by Halpern (2000), which influence the manifestation of specific (spatial-verbal) abilities, but one cannot cover all relevant topics in one chapter or even one book.

Holland's model of vocational interests and the calculus describing its psychometric (hexagonal) organization is the dominant model today. It deserves to be. Moreover, Holland can be very entertaining, and his chapter is true to this tendency. It is an absolute delight to read.¹ He traces the development of his thinking, touches on aspects of his own career development, and concludes with some applied applications. Indeed, Holland's RIASEC (Realistic, Investigative, Artistic, Social, Enterprising, & Conventional) model is to vocational interests what the big five is to personality (McCrae & Costa, 1997) and what Carroll's (1993) hierarchy is to cognitive abilities. As a collective, these three models constitute benchmarks for advances in the study of individual differences to be measured against (Lubinski, 2000); needless to say, Holland's model has survived cross-cultural and longitudinal scrutiny.

Day and Rounds review vocational interest structures and offer a good starting point for combining interests with robust findings on occupational complexity, where "complexity" in occupational level or prestige constitutes a general factor with auxiliary support running from Tyler (1964, p. 176) to Schmidt and Hunter (1998). A corollary found in this chapter needs to be stressed, however, as Rounds, more than any other modern writer, has taken the lead in getting interests into mainstream psychological outlets. I hope it is only a matter of time before interest dimensions attract experimentalists; RIASEC dimensions, for example, must surely structure more than long-term ("ultimate") development or discrete educational-vocational outcomes (as important as these group membership criteria are). For example, individual differences in selective attention, as a function of complex arrays of moment-to-moment ("proximal") fluctuations in stimulus fields are likely guided by interest dimensions

¹ Unfortunately, Table 4.1 (pp. 93-94) is confusing, because facets of data are duplicated on both pages.

to some extent (Postman, Bruner, & McGinnies, 1948; Postman & Schneider, 1951). Interests are undoubtedly a causal force in guiding attention toward dispositionally congruent environmental features (Lubinski, 1996). This might explain why Strong (1943, p. 6), in his classic work, chose to quote William James, when speculating on the role that interests play in proximate and ultimate development:

Millions of items of the outward order are presented to my senses which never properly enter into my experience. Why? Because they have no interest for me. My experience is what I agree to attend to. Only those items which I notice shape my mind—with-out selective interest, experience is an utter chaos. (James, 1890, p. 402)

More than anyone else, Rounds has placed interests under the noses of those most equipped to examine the scope of this idea.

On other fronts, practitioners will value Zytowski's review of using interest inventories with clients. Spokane and Decker provide a good review of the large vein of literature on measured versus expressed interests; and Tinsley and Chu do the same for research on interpretation outcomes. Swanson reviews the literature on stability and change, Fouad summarizes validity evidence, Crites examines operational definitions, and Harmon discusses interest measurement—as does Hartung using card sorts. Walsh provides a good review of contemporary interest measurement, noting that the (modern) Strong interest inventory is the fifth most frequently researched assessment instrument today. Under-scoring the importance of interests in general personality development places Walsh in good company (Roe, 1956, p. vi), as does his focus on how interest inventories attempt to measure motivational determinants to life decisions (e.g., the school-to-work transition). Indeed, the complementary mixing of basic and applied research constitutes one of the overall strengths of this volume. Profitable basic and applied mixings are facilitated by the editors' introductory remarks, before each section.

Synthetic Work: Particularly in Relation to Other Domains and Topics

On the critical side, the next edited volume of this caliber would profit from a more sophisticated (quantitative) review of the major interest dimensions (e.g., Holland's RIASEC) rather than narrative discourse. Moreover, it should not be assumed that everyone embraces Messick's ideas about "consequential validity," or that it is an important scientific concept; for example, I see it (like others) as more of a political concept. Finally, a second edition might strive to foster more along the lines of interdisciplinary consilience (Wilson, 1998). Complex behavior is almost always multiply determined. And when the final story of human psychological diversity is written, interests will occupy an important place, but so will abilities and aspects of personality not captured by interest assessments. Yet, the integrative work found in this volume is primarily restricted to the latter, even though more encompassing (multidimensional) models are available.

There is much discussion in the last half of this book on the importance of combining conventional measures of personality with vocational interest assessments for a more comprehensive picture of human individuality, particularly in connection with how such individuality is expressed in the world of work. This is great. And it points to a successful accomplishment of the interest domain, achieving meaningful cross-domain connections (Ackerman, 1996; Lubinski, 2000). However, if we are really interested in "what the data say," certainly conventional abilities need to be genuinely embraced as well. Actually, with respect to educational and vocational outcomes, the data say that abilities have more to offer (Schmidt & Hunter, 1998; Wilk, Desmarais, & Sackett, 1995; Wilk & Sackett, 1996); but there is no need to play a zero sum game, because all three domains (abilities, interests, personality) hold significant and unique information. This is likely what motivated Terman (1931) to

write the Introduction to Fryer's (1931) classic *The Measurement of Interests: In Relation to Human Adjustment*. Paterson (1957), Brayfield (1960), and Tyler (1964) all said this long ago; what is new, however, is that important advances are now available: Ackerman (1996); Dawis and Lofquist (1984); and Snow, Corno, and Jackson (1996) have constructed constellations of personal attributes (trait clusters, taxons, aptitude complexes, respectively), by combining affective, cognitive, and conative domains for conceptualizing differential proclivities toward learning and development. When teamed with Scarr's (1996; Scarr & McCartney, 1983) theorizing about internal drives emanating from multiple dimensions of human individuality and the commensurate need for multiattribute assessment (Dawis, 1992), these models are cogently placed in a broader context of life span development. With contemporary trends in occupational and vocational psychology focusing more on adult development, Ackerman's (1996) formulation is particularly timely, because it points to ways to construe the particulars of lifelong learning.

With respect to applied applications, it is fine to build subjective (self-report) estimates of confidence or self-efficacy, and these are likely to be helpful in counseling, but it is important to keep in mind the strong shoulders that counseling psychology stands on (Brayfield, 1960, 1962; Dawis, 1992, 1996; Paterson, Schneider, & Williamson, 1938; Tyler, 1964, 1974; Williamson, 1965). For example, the applied utilities of subjective appraisals need to be assessed in the context of objective indicators of the abilities under analysis, and in conjunction with meaningful outcomes, for empirically documenting the unique contribution of these "new kids on the block" (Dawis, 1984, p. 467). I fear that some self-report measures of human capability may not add incremental validity to external criteria, over and above preexisting measures of abilities and interests. Examining this possibility is needed, given the amount of redun-

dancy running through psychological assessment tools (Dawis, 1992, p. 16; Sanders, Lubinski, & Benbow, 1995).

Finally, when modeling intervention outcomes, it is important to stress comprehensive assessment to avoid misspecification or errors of underdetermination in purported causal systems. Some writers come perilously close to fostering what Williamson (1965) referred to as a "truncated form of vocational assessment" (p. 140). Surely two students with commensurately low levels of self-efficacy for realistic occupations (at the professional level) are approached quite differently by counselors if one has the ability to visualize in three-dimensional space in the top few percentage points, whereas the other is in the bottom quartile of the general population (other things being equal). Of course, all well-trained counselors realize this—Strong (1943, p. vii) stressed this point in the first paragraph of his Preface—but *Vocational Interests* is relevant to a much broader audience of applied and basic scientists. So, I would have liked a bit more caution exercised when psychological appraisals (for something as important as educational or vocational choice) are restricted to one medium (i.e., exclusively, *L*-data, *Q*-data, or *T*-data).

Conclusion

This is an important book. I highly recommend it. It is an absolute must for those interested in why people approach and avoid contrasting learning and work opportunities and the developmental antecedents to educational and vocational choice. On my bookshelf, it will be placed near Fryer (1931), Paterson et al. (1938), Strong (1943), Tyler (1953), and Campbell (1971), but, perhaps, most important, also near Williamson's (1965) *Vocational Counseling: Some Historical, Philosophical, and Theoretical Perspectives*. Collectively, this impressive lineage communicates why it was important for counseling psychology to evolve in the 1950s for bridging the developmental chasm between educational and industrial psychology (Dawis, 1992).

The idea here is to impart conceptual tools to clients and students, so they are better equipped to take charge of their personal development. I think, too, that, like Williamson (1965), Savickas and Spokane leave readers with a clear appreciation of why Leona Tyler (1992) was correct when she remarked that the skills and research products of counseling psychology (helping people in life planning and providing them with valid information for doing so) are forever needed. □

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