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Cross-Cultural Career Assessment: Review and Prospects for the New Millennium

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A distinct body of research literature reflects work initiated in the last decade of the 20th century to examine issues in the development and use of career assessment instruments across cultures. The authors review this literature to integrate current understandings of career assessment in cultural context and to identify potentially fruitful avenues for future inquiry. The theoretical framework of cultural validity and cultural specificity developed by Leong and Brown was used to guide the current review. Based on this framework, the review focuses on literature dealing with (a) the cultural validity of career assessment instruments for use cross-culturally with racial and ethnic minority populations, (b) the extent to which culture-specific variables may influence the career assessment process, and (c) the construction and validation of new culture-specific career assessment measures. Most research contained within the review pertains to cultural validity with much less attention given in the current literature on new test construction and cultural specificity. The authors conclude their review with a summary of findings and implications for research and practice in career assessment. Surveying leading scholars in the fields of career development and vocational psychology could elaborate our understanding of career assessment in cultural context and determine empirically its prospects for advancement and refinement.

Keywords: Cross-cultural career assessment, multicultural career assessment, career assessment literature reviews, multicultural career development, career assessment

The last decade of the 20th century witnessed the commencement of substantial and concerted efforts by career developmentalists and vocational psychologists to more fully understand, explicate, and account for culture's influence on the career assessment process. With the dawn of the 21st

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century and a new millennium now upon us, a small yet distinct body of empirical and conceptual literature has emerged that examines issues in the development and use of career assessment instruments across cultures. This research literature constitutes part of the vast career assessment literature, reviews of which have consistently identified as a primary goal the revision of existing career assessment instruments and the development of new measures to more adequately address cultural diversity (Betz, 1992; Hackett & Watkins, 1995; Oliver, Lent, & Zack, 1998; Spokane & Jacob, 1996; Subich, 1996; Subich & Billingsley, 1995). An integrated review of the literature that deals with cross-cultural career assessment could promote progress toward this goal by both consolidating contemporary knowledge of cross-cultural career assessment and considering the prospects for its advancement and refinement in research and practice.

In the present article, we review the extant cross-cultural career assessment literature to attempt to provide answers to the basic questions of "What do we know?" and "What do we need to know?" about career assessment with culturally diverse groups. Addressing the former question should indicate current understandings of cross-cultural career assessment. Responding to the latter question should prompt identification of gaps in the literature and suggestions for future research endeavors. To conduct the review we scanned the career assessment, career development, and vocational behavior literature using combinations of the keywords career assessment, multicultural, cross cultural, and vocational assessment within PsycINFO and ERIC databases. This search yielded a total of 38 articles and chapters on the topic of cross-cultural career assessment. The majority of the articles appeared, not surprisingly, in *Journal of Career Assessment* which commendably has made a concerted effort to publish research on cross-cultural career assessment characterized by a special issue devoted to career assessment with racial and ethnic minorities (Walsh, 1994).

From these articles and chapters we select some key studies and models to present an overview of cross-cultural career assessment literature. In presenting this brief review, we adopted Leong and Brown's (1995) theoretical framework of cultural validity and cultural specificity as an organizational framework. The first dimension of cultural validity concerns the extent to which career assessment instruments developed within a predominantly Eurocentric cultural perspective transfer or have relevance for use with non-European cultural groups. The second dimension of cultural specificity is concerned with the extent to which specific cultural variables such as cultural identity development, value orientation, language, communication style, time perspective, and decision-making style influence the career assessment process. A special case of the cultural specificity dimension deals with the development of new instruments to measure culture specific constructs. We decided to devote a special section to this literature dealing with the construction and validation of new career assessment measures for specific cross-cultural career assessment purposes. We review the literature that constitutes work in each of these areas in the next three sections.

Cultural Validity of Career Assessment Measures

The preponderance of cross-cultural career assessment literature involves investigating the validity of existing measures for use in research and practice with traditionally underrepresented groups such as racial and ethnic minorities in the U.S., women, the economically disadvantaged, and

various other cultural groups outside the U.S. Much conceptual, and a germinal amount of empirical literature addresses issues of cultural validity by examining and elaborating the relevance of career assessment methods and models for cross-cultural use.

A dominant strategy of examining the cultural validity of career assessment instruments have been studies aimed at evaluating the cross-cultural structural validity of Holland's (1959, 1985a) model for assessment of career interests (e.g., see Fouad & Dancer, 1992; Rounds & Tracey, 1996; Ryan, Tracey, & Rounds, 1996; Swanson, 1992). Some recent examples include Yu and Alvi's (1996) study of the validity of Holland's model in China and Glidden-Tracey and Greenwood's (1997) evaluation of a Spanish translation of the SDS. These studies have been adding to the cultural validity studies within career psychology by testing the cross-cultural generalizability of the structural dimension to vocational interests as exemplified by Holland's model. There has been numerous studies using this research strategy and we are able to present only a sampling of them as an illustration due to space limitations.

In one study, Fouad, Harmon, and Borgen (1997) examined the structure of vocational interests among a large sample of employed men and women in the community. This archival study was based on 38,000 individuals who participated in the 1994 revision of the Strong Interest Inventory (Strong, Hansen, & Campbell, 1994). The sample consisted of 805 African Americans, 795 Asian Americans, and 686 Hispanics with a comparison group of 36,632 Caucasians. Using this large sample, Fouad et al. (1997) tested the structural dimension within Holland's (1959, 1985a) model for the three racial/ethnic minority groups by using the Strong Interest Inventory data and by using multidimensional scaling (MDS). They found that the data for the racial/ethnic minority groups as well as the Caucasian group did not fit the hexagonal model as proposed by Holland (1985a). Instead, a circular model was found to fit the data more accurately than the hexagonal model. The authors concluded that for some ethnic minority groups, some of the Holland types are more differentiated than others, which is counter to Holland's hypothesis that they are equally differentiated for all groups (i.e., an equidistant hexagonal structure). This finding in the current sample is consistent with several other tests of the hexagonal structure of interest proposed by Holland (Day, Rounds, & Swaney, 1998; Fouad & Dancer, 1992; Lamb 1976).

In a second study in the same special section of the *Journal of Counseling Psychology*, Tracey, Watanabe, and Schneider (1997) also examined the cultural validity of Holland's hypothesis about the hexagonal structure of vocational interests. Comparing a sample of 373 Japanese university students with a sample of 401 university students from a midwestern university in the U.S., Tracey et al. tested three models for the structure of vocational interests. The first model was Holland's 6-type RIASEC circular structure as measured by an abbreviated version of the Vocational Preference Inventory (Holland, 1985b). The second model was an 8-type circular structure developed by Tracey and Rounds (1997) and operationalized by their Inventory of Occupational Preferences (Tracey & Rounds, 1996). The third model was a spherical model of vocational interest developed by Tracey and Rounds and also operationalized by their Inventory of Occupational Preferences. Similar to the Fouad et al. (1997) study, Tracey et al. (1997) also used the RANDALL (Tracey, 1997) program to test for the order of the relationships between the variables among these three models.

As recommended by Hubert and Arabie (1987), Tracey et al. (1997) used the Correspondence Index (CI) to assess the fit of the data for the three models with a higher CI indicating better fit. They found that the spherical model did not fit the data very well with a CI of .59 for the U.S. sample and .45 for the Japanese sample. On other hand, the Holland 6-type RIASEC circular structure performed somewhat better with a CI of .92 for the U.S. sample and .69 for the Japanese sample. However, a test of significance found that the Holland model fit the U.S. sample significantly better than the Japanese sample. In addition, there were important gender differences in the Holland model with the CI for Japanese males being considerably lower (.47) than that for the Japanese females (.75). Finally, it was found that the Tracey and Rounds 8-type circular model provided the best fit to the data with no cultural invariance as in the Holland model (i.e., the model fit equally well for both U.S. and Japanese sample). For this model, the CI for the U.S. sample was .87 whereas the CI for the Japanese sample was .79. Tracey et al. (1997) concluded that the structure of vocational interest seems to transfer well from U.S. to Japanese culture and that the Tracey and Rounds 8-type circular model was the most culturally valid model for the Japanese. In view of the statistical differences in the CI between the U.S. and Japanese samples, they expressed concerns about the cultural validity of Holland's 6-type RIASEC circular structure model of vocational interest for the Japanese population.

Another cultural validity study of the structure of Holland's model was conducted by Farh, Leong, and Law (1998). In a sample of 1,813 university students in Hong Kong, Holland's six personality types were obtained in factor analyses of the students' interest inventory responses. However, further analyses revealed the correlations between types supported neither a circular nor a circumplex model. Holland hypothesized not only that adjacent interest types (e.g., Realistic and Investigative) are more similar than alternate interest types (e.g., Realistic and Artistic), which are more similar than opposite types (e.g., Realistic and Social; a circular model), but also that distances between types are equal (a circumplex or hexagonal model). This structure has been obtained for majority samples in the United States (Holland, 1997), but these results from samples in Hong Kong suggest that the underlying structure may have cross-cultural differences.

Still other studies have found differing fits of Holland's model for different racial and ethnic minority groups. For example, Haverkamp, Collins, and Hansen (1994) used multidimensional scaling analysis to investigate the validity of the hypothesized hexagonal structure of Holland types among Asian American and European American men and women. Although a circumplex structure was obtained for all four groups, the Asian American groups in particular did not exhibit a good hexagonal shape. In addition, while the structure of interests for the European American sample did exhibit the hypothesized order (i.e., RIASEC), the interest structures of the Asian American samples were different. Asian American females showed a reversal of the Conventional and Enterprising types (RIASCE), and the interests of the Asian American men were in the order RISCEA. Distances between the interest types also were not uniform. Others have similarly found a poor fit of Holland's hypothesized structure to interest inventory data from Asian Americans (Rounds & Tracey, 1996). However, other studies found better support for the cultural validity of Holland's model with Asians. For example, the hypothesized hexagonal model *was* found to fit the

interest structure in a sample of 172 employed adults in India (Leong, Austin, Sekaran, & Komarraju, 1998).

It is clear that much more research is needed to evaluate the cultural validity of the various Western-based models of career counseling and career assessment. However, as pointed out by Leong (1997), this program of research on cultural validity, especially of the structural validity of Holland's model of vocational interests, needs to be balanced with a program of research on culture specific factors. At present, the latter area of cultural validity has been relatively neglected. As Leong and Tang (in press) have pointed out, cultural validity studies of Western models of career counseling and career assessment tend to inform us when there is a problem with cultural validity and not why those problems exist. It is much more likely that studies of culture specific factors related to career counseling and career assessment can provide us with clues, if not answers, as to why specific Western models do not work for racial and ethnic minority groups.

Cultural Specificity of Career Assessment Measures

While cultural validity studies have tended to focus on the cross-cultural validity of Western-based models of career assessment and career counseling when applied to culturally different populations, cultural specificity is primarily concerned with special and unique factors that are believed to influence career development and processes for culturally different persons (Leong & Brown, 1995). For our present purposes we will focus on cultural specificity research that examines the influence of key cultural variables on the content and process of career assessment. These variables range from cultural identity development, acculturation, and value orientation, to time perspective and decision-making style.

Of the various culture specific constructs, acculturation and cultural identity have received the most empirical and conceptual attention. Different conceptual frameworks have been proposed to integrate cultural identity and acculturation research into career development and career assessment models. Two of these conceptual frameworks were presented in a special issue of the *Journal of Vocational Behavior* (1994) devoted to the role of racial and cultural identity. Pointing to perceived inadequacies of existing career measures to tap the influence of racial factors on the career decision-making process, Helms (1994) proposed that researchers use racial identity models, such as her own People of Color model and white racial identity models, to frame their investigations. Helms suggested initiating and developing a line of research to attend to issues of racial salience (i.e., the level of importance ascribed to or knowledge of one's racial group) and the construction of measures of socioracial socialization influences on career development.

In the second conceptual framework, Leong and Chou (1994) provided a systematic set of formulations regarding the career problems likely to be encountered by Asian Americans based on their acculturation status. Leong and Chou argued that ethnic identity and acculturation are highly related constructs for Asian Americans. They proposed an integrated framework for combining racial/ethnic identity models and acculturation models. Using Berry's (1980) model as the foundation, Leong and Chou proposed that the question of racial and ethnic identity is essentially a two-dimensional problem; namely, how do members of a racial or ethnic minority group view their own culture and how do they view their dominant host culture?

Although called an acculturation model, Berry's (1980) model deals more directly with cultural identity. Leong and Chou (1994) pointed out that Berry's model maintains that individuals who hold positive views of both their own culture and the host culture are Integrationists. These individuals attempt to have the best that both cultures have to offer. This group is similar, if not identical to, Sue and Sue's (1973) Asian American group, Suinn, Rickard-Figueroa, Lew, and Vigil's (1987) Medium Acculturation group, and Cross' (1971) Internalization group. According to Cross, Blacks who have achieved Internalization are those who have come to value their Black culture, but also find things of value in the White culture. All four models view this as the ideal outcome.

Assimilationists, the second possible acculturation outcome, hold a positive view of the host culture, but a negative view of their own culture (Berry, 1980). This group parallels Sue and Sue's (1973) Marginal Man group, Suinn et al.'s (1987) High Acculturation group, and Cross' (1971) Pre-Encounter group, who holds pro-White and anti-Black attitudes. Individuals who view their host culture negatively and their own culture positively represent the third possible acculturation outcome: Separationists (Berry, 1980), Traditionalists (Sue & Sue, 1973), or the Low Acculturation group (Suinn et al., 1987). Two of Cross's Black racial identity groups fall into this category: the Encounter and Immersion/Emmersion groups (Helms, 1993). Both of these groups hold negative views of White culture and increasingly positive views of their own Black culture. Finally, Berry's model includes a group which is not recognized by the other models. Berry's (1980) Marginal person holds a negative view of both host and own culture.

This integrated model of racial and ethnic identity reveals a considerable amount of convergence in the racial/ethnic identity literature, regardless of whether one studies the acculturation of Cree Indians in Canada (Berry, 1976), Asian American clients struggling with ethnic identity issues at the University of California's Counseling Center (Sue & Sue, 1973), or African American college students' racial identity (Parham & Helms, 1985a, 1985b). Berry's two-dimensional model of acculturation provides an organizational scheme for examining racial and ethnic identity development, identifies areas of divergence in need of further research, and points to areas of confusion that need further clarification.

Leong and Chou (1994) went on to hypothesize specific career outcomes for Asian Americans, given their differential ethnic identity statuses. For example, they proposed that Asian Americans with a Separationist Identity are most at-risk for negative career outcomes due to their position on the acculturation continuum and the predominantly Eurocentric work environments in most organizations and institutions. Leong and Chou hypothesized that Asian Americans with a Separationist Identity, as compared to those with Integrationist or Assimilationist Identities, are more susceptible to occupational segregation, stereotyping, and discrimination. As a result of the above processes, they are also more likely to have lower levels of job satisfaction, upward mobility, and higher levels of job stress.

On the other hand, Leong and Chou (1994) hypothesized that Asian Americans with Integrationist or Assimilationist Identities are less susceptible to occupational segregation, stereotyping, and discrimination due to the closer cultural distance between themselves and the managers and

supervisors in organizations. They are also hypothesized to exhibit higher levels of job satisfaction and lower levels of job stress than Asian Americans with a Separationist Identity. Theoretically, Asian Americans with an Assimilationist Identity are likely to have a slight advantage over those Asian Americans with Integrationist Identity in terms of various career outcomes, but such differences will have to await empirical evidence.

Some recent research has begun to focus on self-construal as an important culture specific variable in our understanding of career assessment with culturally different populations. Based on Leong's (1991) criticism of the Career Maturity Inventory as possibly overemphasizing independence in its conceptualization of career maturity, Hardin, Leong, and Osipow (in press) administered several instruments, including the Crites Career Maturity Inventory (CMI; Crites, 1978) and the Self-Construal Scale (SCS; Singelis, 1994) to 235 self-identified non-Hispanic, white European American and 182 self-identified Asian American college students. Consistent with previous research (Leong, 1991; Luzzo, 1992), the Asian American participants exhibited less mature career choice attitudes, as measured by the CMI, than their European American counterparts. However, these results were moderated by self-construal. Specifically, interdependence, not independence, was found to be most associated with career choice attitudes. Those participants who had high Interdependent self-construals, regardless of the level of their Independent self-construals, had less mature career choice attitudes, as measured by the CMI, than those participants who had lower Interdependent self-construals. No differences in maturity of career choice attitudes were observed based on level of Independence. Further, the three subscales on which the Asian Americans were found to exhibit less mature career choice attitudes than the European Americans (Compromise, Independence, and Involvement) were also the three subscales found to be most related to Interdependence. Specifically, those participants who were high in Interdependence had lower scores on these subscales than participants who were low in Interdependence.

Therefore, the results of this study suggest that Asian Americans may appear to exhibit less mature career choice attitudes because their greater interdependent self-construal is misconstrued as a lack of independence. Although more research is needed on the role of self-construal in the career psychology of Asian Americans, these results do provide strong initial evidence that self-construal is an important culture specific variable affecting the career psychology of Asian Americans. More specifically, the cultural validity of Crites' model (1978) of career maturity that is heavily influenced by a Eurocentric emphasis on independence may have limited cultural validity for Asian Americans. Furthermore, the construct of career maturity may be influenced by the culture specific variable of heavier emphasis on interdependent self-construal among Asian Americans.

Development of New Instruments

The development of new instruments to fully incorporate cultural variables represents one currently small yet prospectively fruitful domain of career assessment science and practice. Some researchers have endeavored to construct measures that more fully and directly attend to appraising specific aspects of the career assessment process in cultural context. We subsequently describe two such endeavors.

External career obstacles such as stereotypes, prejudice, and discrimination represent a central issue in career assessment and counseling with many racial and ethnic groups in the United States. To assist counselors and researchers in appraising the magnitude of this issue, Chung and Harmon (1999) developed and conducted an initial validity study of two new instruments designed to assess levels of perceived occupational opportunity for African Americans. One measure, the Perceived Occupational Opportunity Scale (POOS)-Form B, was derived from existing scales developed by Watts and Carter (1991). The 16-item POOS purports to measure level of generalized perceptions of equal work-place opportunity in areas such as hiring practices, promotion, and interpersonal relations. Chung and Harmon developed a second measure, the Perceived Occupational Discrimination Scale (PODS), using a format derived from Turner and Turner's (1975) Black Discrimination Scale. The PODS purports to measure level of perceived occupational discrimination against African Americans in 26 occupations ranging from lawyer, cook, and musician, to health technician, barber, and physician. Results of two studies provided initial support for the psychometric properties (internal consistency and construct validity) of the two scales.

Two other assessment instruments have been developed to ease and increase the relevance of the career assessment and counseling process with racial and ethnic minorities. These instruments include the Multicultural Career Counseling Checklist (MCCC; Bingham & Ward, 1996; Ward & Bingham, 1993) and the Career Counseling Checklist (CCC; Bingham & Ward, 1996; Ward & Bingham, 1993). Counselors respond to the MCCC to assess their level of multicultural competency and to increase their own cultural awareness. Clients complete the CCC to broaden their cultural perspectives on the world-of-work. A decision tree also assists counselors to determine the need for counseling and when racial and ethnic issues need to be considered. Ward and Bingham note that use of these measures in combination may facilitate a more thorough and culturally relevant career assessment process. They also appropriately caution, however, that substantial research is required to examine the psychometric properties and establish the psychometric adequacy of these instruments.

Conclusion

In conclusion, our brief review of the cross-cultural career assessment literature has found that the literature on cultural validity and cultural specificity is beginning to grow but at a somewhat uneven pace. We found that much more empirical research have been conducted to test the cultural validity of Western models of career counseling and career assessment than studies of culture specific variables. This is especially true with regards to the research on the structural validity of Holland's models of career interests across cultures and racial/ethnic minority groups. More research on the cultural validity of other Western models (e.g., Super's developmental model) is clearly needed. While more research is clearly needed to evaluate the cultural validity of the various Western models of career development, we are actually in greater need of more research on culture specific variables that would help us understand WHY these Western models do not work well for culturally different clients when they are found to lack cultural validity (see Leong & Serafica, in press; Leong & Tang, in press).

References

- Berry, J. W. (1976). Cross-cultural research and methodology series: Human ecology and cognitive style. *Comparative studies in cultural and psychological adaptation*. New York: Sage.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theories, models and some new findings* (pp. 9-25). Boulder, CO: Westview Press.
- Betz, N. E. (1992). Career assessment: A review of critical issues. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (pp. 453-484). New York: Wiley.
- Bingham, R. P., & Ward, C. M. (1996). Practical applications of career counseling with ethnic minority women. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 291-314). Palo Alto, CA: Davies-Black.
- Chung, Y. B., & Harmon, L. W. (1999). Assessment of perceived occupational opportunity for Black Americans. *Journal of Career Assessment*, 7, 45-62.
- Crites, J. O. (1978). *Career Maturity Inventory*. Boulder, CO: Crites Career Consultants.
- Cross, W. E. (1971). The Negro-to-Black conversion experience: Towards a psychology of Black liberation. *Black World*, 20, 13-27.
- Day, S. X., Rounds, J., & Swaney, K. (1998). The structure of vocational interests for diverse racial-ethnic groups. *Psychological Science*, 9, 40-44.
- Farh, J., Leong, F. T. L., & Law, K. S. (1998). Cross-cultural validity of Holland's model in Hong Kong. *Journal of Vocational Behavior*, 52, 425-440.
- Fouad, N. A., & Dancer, L. S. (1992). Cross-cultural structure of vocational interests. *Journal of Vocational Behavior*, 40, 129-143.
- Fouad, N. A., Harmon, L. W., & Borgen, F. H. (1997). Structure of interests in employed male and female members of US racial-ethnic minority and nonminority groups. *Journal of Counseling Psychology*, 44, 339-345.
- Glidden-Tracey, C., & Greenwood, A. K. (1997). A validation study of the Spanish Self-Directed Search using back-translation procedures. *Journal of Career Assessment*, 5, 105-113.
- Hackett, G., & Watkins, C. E. (1995). Research in career assessment: Abilities, interests, decision making, and career development. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (2nd ed., pp. 181-215). Mahwah, NJ: Erlbaum.
- Hardin, E. E., Leong, F. T. L., & Osipow, S. H. (in press). Cultural relativity in the conceptualization of career maturity. *Journal of Vocational Behavior*.
- Haverkamp, B. E., Collins, R. C., & Hansen, J. I. (1994). Structure of interests of Asian-American college students. *Journal of Counseling Psychology*, 41, 256-264.
- Helms, J. E. (1994). Racial identity and career assessment. *Journal of Career Assessment*, 2, 199-209.
- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35-45.
- Holland, J. L. (1985a). *Making vocational choices*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J. L. (1985b). *The Vocational Preference Inventory*. Odessa, FL: Psychological Assessment Resources.
- Holland, J. L. (1997). *Making vocational choices* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Hubert, L., & Arabie, P. (1987). Evaluating order hypotheses within proximity matrices. *Psychological Bulletin*, 102, 172-178.
- Lamb, R. L. (1976). Validity of the ACT Interest Inventory for minority group members. *ACT Research Reports*, 72, 12.
- Leong, F. T. L. (1991). Career development attributes and occupational values of Asian-American and European-American American college students. *Career Development Quarterly*, 39(3), 221-230.
- Leong, F. T. L. (1997). Cross-cultural career psychology: Comments on Fouad, Harmon, and Borgen (1997) and Tracey, Watanabe, and Schneider (1997). *Journal of Counseling Psychology*, 44, 355-359.

Leong, F. T. L., Austin, J. T., Sekaran, U., & Komarraju, M. (1998). An evaluation of the cross-cultural validity of Holland's theory: Career choices by workers in India. *Journal of Vocational Behavior*, *52*, 441-455.

Leong, F. T. L., & Brown, M. T. (1995). Theoretical issues in cross cultural career development: Cultural validity and cultural specificity. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (2nd ed., pp. 143-180). Mahwah, NJ: Erlbaum.

Leong, F. T. L., & Chou, E. L. (1994). The role of ethnic identity and acculturation in the vocational behavior of Asian Americans: An integrative review. *Journal of Vocational Behavior*, *44*, 155-172.

Leong, F. T. L., & Serafica, F. (in press). Cross-cultural perspective on Super's career development theory: Career maturity and cultural accommodation. In F. T. L. Leong & A. Barak (Eds.), *Contemporary models in vocational psychology: A volume in honor of Samuel H. Osipow*. Mahwah, NJ: Erlbaum.

Leong, F. T. L., & Tang, M. (in press). A cultural accommodation approach to career assessment with Asian Americans. In K. Kurasaki, S. Sure, & S. Okazaki (Eds.) *Asian American mental health: Assessment, theories and methods*. Dordrecht, The Netherlands: Kluwer.

Luzzo, D. A. (1992). Ethnic group and social class differences in college students' career development. *Career Development Quarterly*, *41*, 161-173.

Oliver, L. W., Lent, E. B., & Zack, J. S. (1998). Career and vocational assessment 1995-1996: A biennial review. *Journal of Career Assessment*, *6*, 231-267.

Parham, T. A., & Helms, J. E. (1985a). Attitudes of racial identity and self-esteem of Black students: An exploratory investigation. *Journal of College Student Personnel*, *26*, 143-147.

Parham, T. A., & Helms, J. E. (1985b). Relation of racial identity attitudes to self-actualization and affective state of Black students. *Journal of Counseling Psychology*, *32*, 431-440.

Rounds, J., & Tracey, T. J. G. (1996). Cross-cultural structural equivalence of RIASEC models and measures. *Journal of Counseling Psychology*, *43*, 310-329.

Ryan, J. M., Tracey, T. J. G., & Rounds, J. (1996). Generalizability of Holland's structure of vocational interests across ethnicity, gender, and socioeconomic status. *Journal of Counseling Psychology*, *43*, 330-337.

Singelis, T. M. (1994). The measurement of independent and interdependent self-construals. *Personality of Social Psychology Bulletin*, *20*, 580-591.

Spokane, A. R., & Jacob, E. J. (1996). Career and vocational assessment 1993-1994: A biennial review. *Journal of Career Assessment*, *4*, 1-32.

Strong, E. K., Hansen, J. C., & Campbell, D. (1994). *Strong Interest Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Subich, L. M. (1996). Addressing diversity in the process of career assessment. In M. L. Savickas & W. B. Walsh (Eds.), *Handbook of career counseling theory and practice* (pp. 277-289). Palo Alto, CA: Davies-Black.

Subich, L. M., & Billingsley, K. D. (1995). Integrating career assessment into counseling. In W. B. Walsh & S. H. Osipow (Eds.), *Handbook of vocational psychology: Theory, research, and practice* (2nd ed., pp. 261-293). Mahwah, NJ: Erlbaum.

Sue, D. W., & Sue, D. (1973). Understanding Asian Americans: The neglected minority. *Personnel and Guidance Journal*, *51*, 386-389.

Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-identity Acculturation Scale: An initial report. *Educational and Psychological Measurement*, *47*, 401-407.

Swanson, J. L. (1992). The structure of vocational interests for Black American college students. *Journal of Vocational Behavior*, *40*, 144-157.

Tinsley, H. E. A. (Ed.). (1994). Special issue on racial identity and vocational behavior. *Journal of Vocational Behavior*, *44*(2).

Tracey, T. (1997). RANDALL: A microsoft Fortran program for a randomization test of hypothesized order relations. *Educational & Psychological Measurement*, *57*, 164-168.

Tracey, T., & Rounds, J. (1996). The spherical representation of vocational interests. *Journal of Vocational Behavior*, *48*, 3-41.

Tracey, T., & Rounds, J. (1997). Circular structure of vocational interests. In R. Plutchik & H. R. Conte (Eds.), *Circumplex models of personality and emotions* (pp. 183-201). Washington, DC: American Psychological Association.

Tracey, T. J. G., Watanabe, N., & Schneider, P. L. (1997). Structural invariance of vocational interests across Japanese and American cultures. *Journal of Counseling Psychology, 44*, 346-354.

Turner, B. F., & Turner, C. B. (1975). Race, sex, and perception of the occupational opportunity structure among college students. *Sociological Quarterly, 16*, 345-360.

Ward, C. M., & Bingham, R. P. (1993). Career assessment of ethnic minority women. *Journal of Career Assessment, 1*, 246-257.

Watts, R. J., & Carter, R. T. (1991). Psychological aspects of racism in organizations. *Group & Organization Studies, 16*, 328-344.

Walsh, W. B. (Ed.). (1994). Special feature: Career assessment with racial and ethnic minorities. *Journal of Career Assessment, 2*(3).

Yu, J., & Alvi, S. A. (1996). A study of Holland's typology in China. *Journal of Career Assessment, 4*, 245-252.