DOCUMENT RESUME

ED 474 525 CE 084 713

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TITLE Vocational Assessment of At-Risk Hispanic High School Students.

PUB DATE 2002-04-00

NOTE 13p.; Paper presented at the Biennial Meeting of the Society for Research on Adolescence (9th, New Orleans, LA, April 11-14, 2002).

PUB TYPE Reports - Research (143)

EDRS PRICE EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS Adolescents; Comparative Analysis; *Cultural Differences; Evaluation Criteria; Evaluation Methods; Females; Grade 9; *High Risk Students; High School Students; High Schools; *Hispanic Americans; *Interest Inventories; Item Bias; Literature Reviews; Males; Nontraditional Education; Nontraditional Students; Secondary Education; Test Reliability; *Test Validity; *Testing Problems; Womens Education

IDENTIFIERS *Holland Self Directed Search

ABSTRACT

Holland's Self-Directed Search (SDS) protocols were used with at-risk Hispanic female and male adolescents were examined to determine their sensitivity to this population. The SDS was completed by 89 at-risk Hispanic students (49 females and 33 males) in grade 9 at a nontraditional school for students who have been deemed at risk for gang and domestic violence, substance abuse, and early sexual activity and potentially able to benefit from the school's special programs. The students' summary scores were compared with those of two normative samples in the SDS manual the Hispanic population and the high school population. The SDS protocol scores of the males and the females in the study population differed significantly from those of the students in both normative groups, thus directly supporting previous studies suggesting that Holland's model may not be valid for use with special populations. The study population indicated less preference for most of Holland's themes than did the students in the norm samples. The study population members' order of preference for Holland's themes also differed from that of the students in the norm samples. It was concluded that Holland's model might not be sensitive enough to address the unique hurdles faced by the youth in the study population because of their at-risk status. (Contains 12 references) (MN)

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Running Head: Vocation and At-Risk Youth

ED 474 525

Vocational Assessment of At-Risk Hispanic High School Students

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Abstract

The numbers of Hispanic youth that are staying in High School is on the rise. In addition to the traditional academic needs, other issues, such as vocational counseling and continued academic planning, need to be addressed for this population. Despite the increasing numbers of Hispanic youth attempting to widen their academic/vocational opportunities, little is known about their inventoried vocational interest profiles. Additionally, many vocational inventories (most using Holland's model) were designed with tested theories using male, Caucasian, middle class students and adults. To that end, this study examined the Self-Directed Search (SDS) protocols of at-risk Hispanic female and male adolescents to determine their sensitivity to this unique population. Analyses of the SDS protocols indicated significantly different scores (i.e., the Holland code denoting which work area type their interests relate to) for the Hispanic youth. T-test analyses of the scores as compared to norms in the manual indicate difference from the norms. It would appear from these results that the phrasing of the SDS may not be sensitive enough to address the unique needs of this at-risk minority population. While additional normative information for special populations would be a useful addendum to the SDS manual, the wording of specific items may need to be reconsidered.

The Use of the Self-Directed Search With At-Risk Hispanic High School Students

Many more Hispanic youth remaining in high school are planning attendance at post-secondary and higher educational institutions. This phenomenon thusly directs attention to the measurement of their interests. Approximately 11.9% of the U.S. population is categorized as Hispanic (U.S. Census Bureau, 2001). Unfortunately, many ethnic minority groups run the risk of being more likely to drop out of high school and be overrepresented in service, unskilled and skilled occupations and underrepresented in managerial, technical, or professional areas. Therefore, understanding their educational attainment and related factors (e.g., vocational interest) become essential to reconcile the difference and facilitate improved educational and occupational prospects. Of particular importance would be to capture these individuals during adolescence where they are beginning to explore an identity and direction in life. Sadly, some of the decisions and choices minority youth make are based upon circumstance rather than knowledge. One may be less likely, for example, to go to college due to a lack of funds, lack of role models, or a need to work to support the family of origin.

One way to spark interest in occupational outlook is by providing assessment for minority youth early in their high

school career. Identifying potential interests can assist with guidance counseling and course planning. Vocational interest assessment is synonymous with Holland's model, one of the most recognized theories for measuring this construct and the more popular vocational interest inventories (e.g., Self-Directed Search [SDS], Strong Interest Inventory) are based upon this model. The self-scoring capabilities of the SDS make it particularly attractive for use in the high school setting. Unfortunately, this theory has evolved from models based upon male, Caucasian, middle-class adults.

Many studies have been done to evaluate the validity of Holland's model with ethnic minority youth. Fouad and colleagues have conducted numerous studies suggesting the applicability of this model to ethnic minorities (e.g., Fouad & Spreda, 1995; Fouad, 1994; Fouad, Cudeck, Hansen, 1984).

Other authors have found differences between ethnic populations with respect to vocational interest. Davison Avilés and Spokane (1999), for example, compared White, Hispanic, and Spanish Primary Language students vocational interest using various versions of the Strong Interest Inventory. Results indicated a higher interest for Hispanics in the Conventional theme as compared with White students. No other differences were revealed, and suggest that there are limited differences in how minority youth view their initial career aspirations.

Importantly, the sample consisted of 44 at-risk middle school students enrolled in a dropout prevention program. Regardless of race, the students were all of an at-risk status and most likely facing similar psychosocial issues in their lives. Furthermore, the authors point out that interests may not begin to differentiate until high school.

Gade, Fuqua, and Hurlburt (1984) support the notion that high school may be the time for interest differentiation. A comparison of Native American Indian high school students to the normative data of the SDS found significant differences. A review of high-point scales found a significant loading for girls on the Social scale and boys on the Realistic scale. The results suggest that the interest profiles may reflect long-term cultural and socialization experiences. The authors warn that unless local norms are collected for these types of special population, conclusions may be based upon stereotypes.

Given that interest inventories parallel the socialization process, it is hypothesized that measured interest would represent the current social/populace situation. This hypothesis remains untested because normative, standardized interest testing is limited. To that end, the purpose of this study was to determine if differences exist between an at-risk Hispanic high school sample and the normative samples measured with Holland's model. It is hypothesized that the at-risk sample

will offer a different profile, most likely representing stereotyped interests, as compared to the Hispanic and high school normative samples.

Method

A total of 89 at-risk Hispanic 9th grade students (females, N - 49; males, N = 33) with an average age of 14 years, completed the Self-Directed Search (SDS) (Holland, Fritzsche, & Powell, 1997). These students attend a non-traditional school where admittance guidelines state that they are (1) at-risk for gang/domestic violence, substance abuse, and early sexual activity, and (2) have the potential to benefit from the special programs offered at the school. The SDS is based upon Holland's model where six types of work style and settings are identified from self-reported interest correlated with satisfied workers' interests. These six summary scores represent style and settings corresponding to themes of investigative, realistic, conventional, artistic, social, and enterprising.

Results

The students' summary scores were compared with two normative samples in the manual - the Hispanic population and the high school population. One-sample t-tests were conducted to determine the difference in our sample's level of vocational interest as compared to the normative samples. Results are as follows. When our at-risk Hispanic females were compared to the

normative group of Hispanic females, significant differences were found relative for the Realistic ($t = -6.961$, $p < .001$), Investigative ($t = -4.862$, $p < .001$), Social ($t = -8.806$, $p < .001$), Enterprising ($t = -5.172$, $p < .001$), and Conventional ($t = -9.228$, $p < .001$). When compared to the normative group of high school females, similar results were found: Realistic ($t = -4.571$, $p < .001$), Investigative ($t = -4.557$, $p < .001$), Social ($t = -7.477$, $p < .001$), Enterprising ($t = -5.279$, $p < .001$) and Conventional ($t = -3.815$, $p < .001$). When our at-risk Hispanic males were compared to the normative group of Hispanic males, significant differences were revealed for the Investigative ($t = -7.042$, $p < .001$), Artistic ($t = -3.537$, $p < .01$), Social ($t = -8.168$, $p < .001$), Enterprising ($t = -6.595$, $p < .001$), and Conventional ($t = -6.1154$, $p < .001$). When compared to the normative group of high school males, similar results were found: Investigative ($t = -5.045$, $p < .001$), Artistic ($t = -2.909$, $p < .01$), Social ($t = -5.813$, $p < .001$), Enterprising ($t = -4.596$), and Conventional ($t = -3.158$, $p < .001$).

Scatterplots were completed to determine if the rank-order differed between our sample and that of the normative groups. Comparisons were made using the means for each individual interest type, as well as those for the various combinations, using interclass correlations. None of the scatterplots revealed correlations between the groups; hence, the rank orders

of the at-risk sample as compared to other Hispanic or high school students were significantly different.

Discussion

Our results appear to contradict the many studies that have been published suggesting that Holland's model is valid for use with ethnic minorities (e.g., Lattimore & Borgen, 1999; Fouad, Hansen, & Arias Galicia, 1989). It is important to note, however, that most of these studies included subjects who, although of minority status, were college students or working adults. In addition, Kaufman and McLean (1996) found that race/ethnicity was an important variable in determining an individual's patter of interests. Thus, issues of content validity related to Hispanic populations point to the need to establish local norms. The results of this study directly support conclusions drawn by Gade, Fuqua, and Hurlburt (1984) that Holland's model may not be valid for use with special populations. Our at-risk population indicated a lessened preference for most of Holland's themes as well as a difference in their order of preference.

The substantial differences between our at-risk youth sample and the normative groups indicate that test items may not be sensitive enough to the different cultural profile of the at-risk minority youth. These youth, in particular, face unique hurdles due to their at-risk status that may not be addressed by

the content of Holland's model. High SES neighborhoods, for example, tend to have a positive effect on achievement (Leventhal & Brooks-Gun, 2000). Our population hails from poverty stricken neighborhoods with limited resources for in-school as well as after-school community-based intervention programming and community resources (e.g., well-stocked libraries). The importance of gender roles within culture (Torres, 1998) and the messages at-risk youth receive about them from the home cannot be ignored. In addition, the at-risk youth may not have the essential role models in his/her life essential to generating varied interests and potential. Furthermore, the language of the SDS may not capture the interests of this particular population.

Our next study entails the use of item analysis techniques to investigate these item sensitivity issues. Essentially, items may not be sensitive enough in terms of their wording to tap into the interests of the at-risk minority youth. The current model may serve to stereotype and overgeneralize an unnecessarily bleak outlook for this population. It is also important to note that psychopathology (e.g., depression, anxiety) may influence the response style on an inventory measuring interests and future outlook. Future research may want to include a basic assessment of psychopathology as it relates to future outlook and vocational interest. Until such

work is done, the aforementioned elements need to be considered when interpreting the results of any instrument using Holland's model on at-risk minority youth.

References

Davidson Avilés, R.M., & Spokane, A.R. (1999). The vocational interest of Hispanic, African American, and White middle school students. *Measurement and Evaluation in Counseling and Development, 32,* 138-148.

Fouad, N.A. (1994). Career assessment with Latinos/Hispanics. *Journal of Career Assessment, 2,* 226-239.

Fouad, N.A., Cudeck, R., & Hansen, J.C. (1984). Convergent validity of the Spanish and English forms of the Strong-Campbell Interest Inventory for bilingual Hispanic high school students. *Journal of Counseling Psychology, 31,* 339-348.

Fouad, N.A., Hansen, J.C., & Arias Galicia, F. (1989). Cross-cultural similarity of vocational interests of professional engineers. *Journal of Vocational Behavior, 34,* 88-99.

Fouad, N.A., & Spreda, S.L. (1995). Use of interest inventories with special populations: Women and minority groups. *Journal of Career Assessment, 3,* 453-468.

Gade, E.M., Fuqua, D., & Hurlburt, G. (1984). Use of the Self-Directed Search with Native American high school students. *Journal of Counseling Psychology, 31,* 584-587.

Holland, J.L., Fritzsche, B.A., & Powell, A.B. (1997). *Self-Directed Search.* Odessa, FL: Psychological Assessment Resources, Inc.

Kaufman, A.S., & McLean, J.E. (1996). Profiles of Hispanic adolescents and adults on the Holland themes and basic interest scales of the Strong Interest Inventory. *Psychological Reports, 79,* 1279-1288.

Lattimore, R.R., & Borgen, F.H. (1999). Validity of the 1994 Strong Interest Inventory with racial and ethnic groups in the United States. *Journal of Counseling Psychology, 46,* 185-195.

Leventhal T., & Brooks-Gunn, J. (2000). The neighborhoods they live in: The effects on neighborhood residence on child and adolescent outcomes. *Psychological Bulletin, 126,* 309-377.

Torres, J.B. (1996). Masculinity and gender roles among Puerto Rican men: Machismo on the U.S. mainland. *American Journal of Orthopsychiatry, 68,* 16-26.

U.S. Census Bureau. (2001). *Resident population estimates of the United States by sex, race, and Hispanic origin.* Retrieved 8/8/02. http:/eire.census.gov/popest/archives/national/nation3/intfile3-1.txt

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