
The Relationship of Career Decision-Making Self-Efficacy, Vocational Identity, and Career Exploration Behavior in African American High School Students

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This study explores the relationship between the social cognitive construct of career decision-making self-efficacy and the outcome variables of vocational identity and career exploration behaviors in a sample of 72 urban African American high school students. The results indicate that higher levels of career decision-making self-efficacy are related to both a more differentiated vocational self-concept and to greater engagement with career exploration activities. Implications for career guidance and future research are discussed.

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One of the principal tasks of adolescence is the development of various aspects of identity. Career exploration and the formation of career plans play an important role in the overall process of identity formation (Super,

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1963). Career theorists highlight adolescence as a pivotal developmental period in the exploration and formation of potential career objectives. During the high school years, students make crucial career decisions (e.g., completing high school, seeking employment vs. the pursuit of further education) that will inevitably influence their career aspirations, plans, and goals (McWhirter, Rasheed, & Crothers, 2000). In recent years, a growing number of authors (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997; Constantine, Erickson, Banks, & Timberlake, 1998; Flores & O'Brien, 2002; Ladany, Melincoff, Constantine, & Love, 1997; McWhirter, Hackett, & Bandalos, 1998) have underscored the importance of exploring the career development of high school students of color, an area that has received only limited attention in the career development literature.

African American high school students, like many students of color, are often faced with a multitude of challenges when envisioning and planning their potential career paths, possibly including a scarcity of economic resources within their families of origin, schools, and communities; a lack of accessible career role models; and the existence of systemic and institutional discrimination based on race (Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003; Ladany et al., 1997). Research indicates that when compared to European Americans, African Americans are disproportionately represented in lower status jobs and those that do attain higher status jobs are often inhibited from further advancement because of the "glass ceiling" effect (Bigler, Averhart, & Liben, 2003). Although research has begun to examine career exploration among college students of color, the career exploration experiences of African American adolescents continues to be an area in need of empirical investigation (Ladany et al., 1997). This study will focus on three aspects of African American high school students' career development: vocational identity, career decision-making self-efficacy, and career exploratory behavior.

The gradual clarification of a vocational identity is an integral part of the task of identity development that characterizes adolescence (Erikson, 1963). Vocational identity has been defined as the realization of an increasingly stable conceptualization of one's own vocational interests, talents, and goals (Holland, Daiger, & Power, 1980). The establishment of a vocational identity may serve as a vehicle through which adolescents actualize their emerging self-concepts and integrate past and present aspects of themselves (Erikson, 1963; Super, 1963). A number of African American high school students must also attempt to formulate a vocational identity in the midst of economic and environmental uncertainty. Researchers have observed that the additional bur-

dens and potential barriers of poverty and difficult home, school, and community environments may compete with the energy and attention of minority youth during this period of development (Constantine et al., 1998; Ladany et al., 1997). This study will examine the extent to which the formation of vocational identity for these students might be affected by the social cognitive variable of self-efficacy.

Vocational identity, as just noted, is thought to reflect a stable pattern of interests and goals. However, based on Bandura's (1986) learning theory, social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994, 2002) has called attention to cognitive factors that are antecedent to and influence the development of interests and goals. Central to this model is the construct of self-efficacy. From a social cognitive perspective, the extent to which people believe that they have the capacity to perform certain behaviors determines how likely they are to engage in those behaviors (or, alternatively, to refrain from doing so). For social cognitive career theorists, self-efficacy is a critical factor that mediates whether interests, goals, and actions develop in a particular domain. Because engaging in career exploration and decision making is crucial to career development during the high school years, this study examined career decision-making self-efficacy.

Career decision-making self-efficacy denotes individuals' degree of confidence that they can successfully engage in tasks associated with making a career choice and with commitment to a career (Taylor & Betz, 1983). A number of studies have found that various forms of career self-efficacy play a significant role in the development of vocational interests, choice, and behavior (see Lent et al., 2002). Several researchers have observed that examining self-efficacy may offer insight into the formation and pursuit of educational and career goals in African American youth (Alliman-Brissett, Turner, & Skovholt, 2004; Constantine et al., 1998; Pope-Davis & Hargrove, 2001). However, none of the studies examined the influence of career decision-making self-efficacy on the career development of African American high school students.

The present study examined the ways in which career decision-making self-efficacy may be related to vocational identity and the degree of engagement in career-related activities in a sample of African American adolescents. Based on the literature discussed above, it was expected that a greater sense of career decision-making self-efficacy would predict a more integrated vocational identity and increased engagement in career-related tasks. The study assessed both psychological (vocational identity) and behavioral (reported career activities) correlates of the social cognitive variable of self-efficacy within this understudied population.

Method

Participants

Participants were 72 high school students from an urban high school in a large northeastern city whose parents or guardians consented to their participation in the study. Of the participants, 62.5% were male ($n = 45$) and 37.5% were female ($n = 27$). All participants self-identified racially as Black, non-Hispanic. The students' ages ranged from 15 to 19, with a mean age of 16.3 ($SD = .91$). Most students indicated that they were in 11th grade (51.4%), followed by 37.5% in 10th grade and 9.7% in 12th grade (missing = 1.4%). The majority of students (91.4%) reported that they were born in the United States, followed by a small percentage of students who reported that they were born in Jamaica (2.9%) or elsewhere in the Caribbean (5.6%) (missing = 2.8%). Some 75% of the students attending this high school were eligible for participation in the U.S. Department of Agriculture free lunch program. Eligibility is determined by multiplying the year's federal income poverty guidelines by 1.30.

Procedure

Packets of instruments were distributed to participants during class time in the classrooms of teachers who had agreed to participate in a brief study about career development. After listening to a description of the study, students were informed that their participation was voluntary, that their responses would be kept anonymous, and that they were free to withdraw at any time. Prior to the survey date, information about the study was sent to the parents or guardians of the children in the classes that would be inventoried. The information included a postage-paid form to mail back to the investigator if they did not wish their children to participate. Only students whose parents had given passive consent were eligible to participate (approximately 99%). An alternative class assignment was offered for students who might not wish to participate. All students present at the time of the survey chose to participate. The procedure received approval from the institutional review boards of both the investigators' home institution and the Board of Education in the city where the school was located. The packets were counterbalanced and included the Career Decision-Making Self-Efficacy Scale–Short Form (CDMSES-SF; Betz, Klein, & Taylor, 1996), My Vocational Situation (MVS; Holland et al., 1980), Career Search Activities Index (Solberg, Good, Fischer, Brown, & Nord, 1995), and a demographics questionnaire.

CDMSES-SF. The CDMSES-SF (Betz, Klein, & Taylor, 1996) is a 25-item short-form of the original Career Decision-Making Self-Efficacy Scale, devel-

oped by Taylor and Betz (1983). The scale measures respondents' self-efficacy beliefs in relation to career decision-making tasks. Individuals rate their confidence that they could successfully complete a variety of career-related tasks on a 10-point Likert-type scale ranging from *no confidence* (0) to *complete confidence* (10). Higher scores indicate higher levels of career decision-making self-efficacy. Validity of the CDMSES-SF has been established such that scores from the CDMSES-SF have been linked to career indecision (Betz et al., 1996). Internal consistencies ranging from .92 to .97 have been reported for the short form (Nilsson, Schmidt, & Meek, 2002). Luzzo (1993) reported a .83 test-retest reliability for the full scale. Internal consistency for the sample used in the present study was $\alpha = .87$.

Career Search Activities Index. The Career Search Activities Index is a list of 24 career search activities developed by Solberg et al. (1995). Respondents are asked to indicate whether they had participated in each of the activities within the past 6 months. Items include such activities as "done a mock interview" and "made a list about what you want in a career." The sum total number of the activities completed is used as the score for this index. Using their sample of 426 college men and women, Solberg et al. (1995) reported an internal consistency of $\alpha = .73$ using the Kuder-Richardson 20 formula. The internal consistency for the sample used in this study was $\alpha = .82$.

MVS. The MVS was designed to identify three potential types of difficulties that people encounter in vocational decision making: lack of information about jobs and/or training, perceived environmental or personal barriers, and difficulties with vocational identity. The present study focused on vocational identity.

The Vocational Identity subscale (VIS) of the MVS consists of 18 true or false items intended to measure the extent to which respondents have a clear picture of their goals, strengths, and interests. The score for VIS comprises the total number of false responses. Holland et al. (1980) reported internal consistencies for a sample of 185 male high school students and 311 female high school students. The VIS was reported to have an internal consistency of $\alpha = .86$ for both men and women using the Kuder-Richardson 20 estimate. Holland (1991) reported a .75 test-retest reliability for the VIS at intervals of 1 to 3 months. Lucas, Gysbers, Buescher, and Heppner (1988) reported a test-retest coefficient of .64 for the VIS during a 3- to 5-month period. The internal consistency coefficient for the sample used in the present study was $\alpha = .78$. Leong and Morris (1989) assessed the construct validity of the VIS using various measures of personality and vocational variables. Their research provided evidence for convergent validity for the VIS. Specifically, vocational identity

was negatively related to social avoidance, distress, and intolerance of ambiguity and positively related to a high level of career maturity and the tendency to use a rational decision-making style.

Results

Analyses

As a preliminary analysis, a multivariate analysis of variance (MANOVA) was used to determine the potential impact of gender and grade level on the three variables: career decision-making self-efficacy, vocational identity, and career search activities. The MANOVA revealed that there were no significant gender differences among the three variables (Wilks's $\Lambda = .98$), $F(3, 63) = .41$, *ns*. Similarly, among by grade level were not significant (Wilks's $\Lambda = .93$), $F(6, 126) = .83$, *ns*. Therefore, gender and grade level were not included as variables in the subsequent analysis. See Table 1 for the means, standard deviations, and correlations among the variables included in the principal analysis.

A multivariate regression analysis was used to examine career decision-making self-efficacy as the predictor variable and vocational identity and career search activities as criterion variables. Career decision-making self-efficacy (Wilks's $\Lambda = .84$), $F(2, 69) = 6.76$, $p < .01$, was found to be a significant predictor overall. Because multivariate significance was reached, univariate analyses were examined. These analyses indicated that career decision-making self-efficacy had a significant positive relationship with vocational identity, $F(1, 71) = 7.06$, $p < .01$, and with career search activities, $F(1, 71) = 7.41$, $p < .01$.

Discussion

This study examined the relationship between career decision-making self-efficacy, vocational identity, and career search activities in a sample of African American high school students. Results of a multivariate regression analysis indicated that career decision-making self-efficacy was related to vocational identity and the extent of reported career exploration activities. These results offer some support for the recent literature highlighting the importance of social cognition in career development (e.g., Lent et al., 1994, 2002). Students who had greater self-confidence in making career-related decisions were also likely to have a better defined sense of their interests, abilities, and goals as well as to actively engage in activities related to career exploration.

Table 1
Correlations, Means, and Standard Deviations for Career Search
Activities, Vocational Identity, Perceived Barriers, and
Career Decision-Making Self-Efficacy

	Career Search Activities	Vocational Identity	Self-Efficacy
Career search activities	1.00		
Vocational identity	0.14	1.00	
Self-efficacy	0.31*	0.30*	1.00
<i>M</i>	15.07	10.19	3.98
<i>SD</i>	5.19	3.91	0.38

Note: $N = 72$.

* $p < .01$.

Implications

These results have implications for teachers and counselors working in career education with African American high school students. First, consistent with the SCCT model, they highlight the importance of social-cognitive factors in the development of the vocational identity of African American adolescents. The findings suggest that career counselors and educators should explore students' beliefs about their capacity to engage in career exploration tasks as an integral part of career counseling. Students who believe that they are able to engage in the process are more likely to do so and more likely to report a more integrated vocational identity. Helping students identify their beliefs about their abilities to both undertake exploration tasks and make decisions appears to be an important corequisite to helping them identify patterns of interests. Furthermore, the results indicate that self-confidence in making career-related decisions influences not only a student's vocational identity but also the likelihood that he or she will engage in exploratory behaviors. As predicted by the SCCT, students' beliefs about their ability to successfully engage in activities led to action in those areas.

Thus, it is important for teachers and counselors to gain an understanding of students' self-efficacy regarding specific career exploration activities. Career education aimed at helping students to identify their interests and gain an understanding of the world of work might also incorporate strategies to enhance students' sense of self-efficacy about performing tasks related to career exploration. In addition, training for educators and career counselors

should emphasize the relevance of self-efficacy and should focus on ways for them to address issues related to self-efficacy with African American students.

Limitations and Recommendations for Future Research

Given the limits of the existing research related to the career development of African American adolescents, this exploratory study purposefully tested a simple model with a small sample. However, the study has a number of important limitations, and the results must be interpreted with caution. First, because the sample was not random, but used preexisting classroom-based groups, care must be taken in drawing inferences to other populations of African American or Black adolescents. Second, the small sample size may not have allowed sufficient power to detect all effects present (Type II error). For instance, might differences in the variables between grades been found in a larger sample? Future research is needed to identify other variables that may influence the career-related attitudes and behaviors of this population. For example, it may be important to identify antecedents that may account for differences in career decision-making self-efficacy among African American high school students. This study did not address factors such as racial identity or social support, which may play a crucial role in the career development of this population. Moreover, the study did not account for the actual barriers (i.e., institutionalized racism, poverty) that may affect these students' career development even more significantly than the variables discussed.

Summary and Conclusion

Understanding factors that affect the career development of African American adolescents is an essential aspect of multicultural competence for career counselors and educators. For this sample of African American high school students, the results indicated that greater career self-efficacy was related to a more defined vocational identity and greater engagement in career exploration tasks. Based on these findings, it would seem critical to assess and address African American students' beliefs about their capacity for career exploration as an integral part of vocational guidance and career education.

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