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AUTHOR Luzzo, Darrell Anthony  
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ABSTRACT

This study examined Mexican American college students' perceptions of career-related barriers and the relationship between perceptions and the students' sense of control over and responsibility for career decision making. Mexican American students (57 men and 68 women) at a state-supported university in the Southwest completed a demographic questionnaire and two career assessments: the Career Beliefs Inventory and the Career Decision-Making Self-Efficacy Scale (CDMSE)--Short Form. No sex differences among the criterion variables were identified. No significant relationship was found between the number of past career-related barriers and CDMSE; however, a significant negative relationship was found between CDMSE and the number of future barriers perceived. The more future career-related barriers students perceived, the lower their CDMSE was likely to be. Study skills and financial problems were the two most cited past and future career-related barriers. Students who exhibited relatively high levels of control and responsibility regarding career decision making tended to perceive the fewest barriers to achieving their career goals. It was recommended that counselors help Mexican American students differentiate between real and perceived barriers and develop realistic perceptions related to occupational goals and career development. (Contains 38 references.) (MN)

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Correlates of Mexican American College Students'  
Perceptions of Career-Related Barriers

Darrell Anthony Luzzo

ACT, Inc.

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Chicago, IL

Please forward all correspondence to:

Darrell Anthony Luzzo, Director  
Career Transitions Research  
ACT, Inc.  
2255 N. Dubuque Road  
P.O. Box 168  
Iowa City, IA 52243-0168  
319/337-1223  
fax: 319/339-3020  
luzzo@act.org

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Abstract

Mexican American college students (57 men and 68 women) completed two career assessments and a questionnaire about career-related barriers. Results revealed significant, negative relationships between perceived barriers and participants' sense of control over and responsibility for career decision making and a significant, negative relationship between future barriers and career decision-making self-efficacy.

## Correlates of Mexican American College Students'

### Perceptions of Career-Related Barriers

In her review of existing research literature, Arbona (1990) noted that the career counseling research related to Mexican Americans and other Hispanic groups is sorely limited in terms of content and lacks a strong theoretical foundation. Hackett, Lent, and Greenhaus (1991) echoed Arbona's concern, pointing out that despite demographic trends that indicate that Hispanics are one of the fastest growing minority groups and the nation's youngest subpopulation, the career development of Hispanics has received very little attention in the theoretical and empirical literature. Arbona has particularly emphasized the need for research addressing the career development of Hispanics "to help us understand the barriers they face in the pursuit of their educational and occupational aspirations" (p. 301).

Research has consistently revealed that Hispanics have low expectations of achieving their educational and occupational aspirations, suggesting that they expect to encounter many barriers in the process of working towards their career goals (Arbona, 1990). Based on her exhaustive review of the literature, Arbona concluded that learning more about the nature of the career problems faced by Hispanics is critical before effective diagnostic and treatment strategies can be developed. She singled out the need to determine what barriers are perceived by Hispanic groups in achieving their aspirations and how the perception of these obstacles and other career beliefs impacts their engagement in the career decision-making process. Investigating the relationship between perceived barriers and career beliefs will help clarify our understanding of the role that perceived barriers play in the broader context of Mexican American students' career development.

### Perceived Barriers

Although several traditional and contemporary theories of career choice and development have recognized the importance of perceived barriers in career decision making (e.g., Crites, 1971; Farmer, 1985; Gottfredson, 1981; Lent, Brown, & Hackett, 1994), only recently have researchers investigated the influence that perceived barriers can have on the career decision-making process (Luzzo, 1993, 1995, 1996b; McWhirter, 1997; Swanson & Tokar, 1991a, 1991b; Swanson & Daniels, 1994; Swanson, Daniels, & Tokar, 1996; Swanson & Woitke, 1997). Results from these studies consistently indicate that high school and college students perceive a substantial number of barriers to their academic and occupational success. The need to further investigate the role of perceived barriers in career development is underscored by the generally agreed upon perspective that career-related barriers are problematic forces in career decision making (Gottfredson, 1981). Perceived barriers are almost uniformly considered instrumental in eroding students' self-confidence and complicating the career planning process (Greene-Black, 1988). Evidence suggests that this is especially true for Mexican American students.

In the 1970s, research revealed that Mexican American youth express high levels of occupational and educational aspirations yet tend to be less confident in their ability to achieve these aspirations than their peers from other ethnic backgrounds (Evans & Anderson, 1973). Financial concerns, the expectation of racial discrimination, and lack of educational opportunities often contribute to Mexican Americans' perceptions that career aspirations may not be fully realized (Chacon, Cohen, & Strover, 1986; Holsinger & Chapman, 1984; Portes, McLeod, & Parker, 1978). In an investigation of undergraduates attending a large four-year

university in Southern California, Luzzo (1993a) discovered that Mexican American students cited ethnic discrimination barriers more often than students from most other ethnic backgrounds. Differences also existed among the students regarding their perceptions of financial and study skills barriers, with Mexican American students citing such barriers more often than students from other ethnic groups.

One of the primary reasons that the perception of occupational barriers among Mexican American college students can be especially problematic is based on the argument that the more barriers individuals perceive to their occupational goals and aspirations, the more likely it is for them to possess maladaptive beliefs about the difficulties they are likely to encounter while engaging in the career decision-making process. In other words, students who believe that a significant number of career-related barriers stand in the way of realizing a particular career goal may possess career beliefs that can interfere with effective career decision making. For example, students who possess several significant barriers associated with their future career development also may believe that they have little control over the career decision-making process. Like students from other ethnic backgrounds, Mexican American students who adopt such a belief system may lower their academic and occupational standards, thus compromising their career goals (Gottfredson, 1981). On the other hand, students who perceive relatively few occupational barriers may retain a sense of control over the career decision-making process, may possess higher levels of confidence in their career decision-making abilities, and may continue to work towards the realization of their aspirations. Investigating the relationship between perceived barriers and career beliefs and attitudes helps clarify our understanding of the role that perceived barriers play in the

broader context of Mexican American students' career development.

### Career Beliefs and Attitudes

Krumboltz' (1991b) discussion of the role that career beliefs play in career planning and development clarifies the importance of integrating a discussion of career beliefs into career counseling interactions with clients:

The way in which people make career decisions, search for jobs, and seek promotions depends on what they believe about themselves and the world of work. If their beliefs are accurate and constructive, they will act in ways that are likely to foster the achievement of their goals. If their beliefs are inaccurate and self-defeating, they will act in ways that make sense to them but may hinder accomplishment of their goals.

(Krumboltz, 1991b, p. 1).

Several of the career beliefs identified by Krumboltz (1991b) seem to be directly linked with the perception of career-related barriers. For example, career beliefs regarding one's sense of control over and responsibility for career decision making (referred to by Krumboltz as the career beliefs of control and responsibility) may differentiate between persons who perceive varying numbers of career-related barriers. College students who believe that they have little or no control over the career decision-making process and who believe that they lack all responsibility for the career-related outcomes in their lives may be more likely (than students who sense significant control over and responsibility for career decision making) to view many of the challenges associated with career decision making as problematic barriers or obstacles. Rather than viewing career-related challenges as motivating forces that serve a valuable purpose in career development, students whose career beliefs are

inaccurate and self-defeating are likely to consider educational and occupational challenges as significant career-related barriers that are difficult to overcome.

In addition to control and responsibility, several other career beliefs identified by Krumboltz (1991b) also seem directly associated with the perception of career-related barriers. These beliefs include career path flexibility, job experimentation, negotiating/searching, and working hard. In terms of career path flexibility, students who perceive relatively few occupational barriers would probably believe that several different routes can lead to career goal attainment. Such students would be likely to espouse the belief that if a particular route to a career goal is not feasible, then other routes are worthy of exploration. On the other hand, students who perceive several significant barriers to achieving career success may be prone to believing that there is only one path (primarily determined by external factors) to achieving their career goals. Such a belief limits the consideration of career options and tends to make a single obstacle seem overwhelming (Krumboltz, 1991b).

It also makes intuitive sense that students who perceive relatively few career-related barriers are likely to feel secure exploring alternative occupations (referred to by Krumboltz as job experimentation), to take constructive action in advancing a career goal (negotiating/searching), and to believe that hard work will bring success (working hard). As such, it seems appropriate to hypothesize that these career beliefs also will be associated with the perception of career-related barriers.

In addition to the career beliefs discussed by Krumboltz (1991b) as particularly influential in career decision making, vocational psychologists have identified other attitudes and belief systems that appear to be directly linked with effective career development. One



such construct that has received substantial attention in the vocational literature in recent years, and that appears to be directly linked with the perception of career-related barriers, is career decision-making self-efficacy (CDMSE). Based on Bandura's (1977, 1982, 1986, 1997) self-efficacy theory, CDMSE is defined as an individual's confidence in her or his ability to engage in effective career decision making (Taylor & Betz, 1983). Application of self-efficacy theory to the career decision-making process is based on the idea that low levels of CDMSE lead to the avoidance of career decision-making tasks and behaviors, whereas high levels of CDMSE lead to increased participation in career decision-making activities (Luzzo, 1996a; Taylor & Betz, 1983). Research has repeatedly supported these contentions, revealing significant, positive relationships between CDMSE and various factors associated with adaptive career functioning, including engagement in career exploration activities (Blustein, 1989), career decidedness (Taylor & Popma, 1990), vocational identity (Robbins, 1985), and career maturity (Luzzo, 1993b).

In a recent investigation of the relationship between the perception of career-related barriers and CDMSE, Luzzo (1996b) discovered a significant, negative relationship between the perception of future career-related barriers and the CDMSE of an ethnically-mixed sample of college students. Findings indicated that participants who believed that they have several educational and occupational barriers to overcome in the future were more likely to exhibit lower levels of CDMSE (i.e., display less confidence in their ability to make career decisions) than students who did not envision as many career-related barriers. Exploring the degree to which the perception of career-related barriers is related to CDMSE among Mexican American college students might prove especially useful in developing appropriate career

interventions that incorporate particularly salient factors in Mexican American students' career development.

### Purpose of the Study

The purpose of the following investigation was to evaluate the relationships between the career-related barriers perceived by Mexican American college students, their career beliefs, and their CDMSE. It was expected that there would be significant, negative relationships between the number of career-related barriers perceived by participants and the career beliefs of control, responsibility, career path flexibility, job experimentation, negotiating/searching, and working hard, and as well as a significant, negative relationship between perceived barriers and participants' CDMSE. In particular, it was expected that participants who perceive relatively few barriers to their career goals would exhibit more appropriate career beliefs than participants who perceive a substantial number of barriers. Similarly, the fewer the number of career-related barriers perceived by participants, the higher their CDMSE was expected to be.

## Method

### Participants

Participants included 68 Mexican American women and 57 Mexican American men enrolled in an undergraduate social studies course at a state-supported university in the Southwest. All of the participants were first-year students enrolled in the class as part of the University's core curriculum program. Ages of the students ranged from 18 to 22 ( $M = 18.63$ ,  $SD = 0.69$ ).

## Measures

### **Perceived Barriers**

Based on methodology employed in previous research (Luzzo, 1993a, 1995, 1996b), perceptions of barriers were determined by having each participant respond to two open-ended questions appearing on the demographics questionnaire: "(1) What barriers do you believe you have experienced up to this point in your career development? (2) What barriers do you believe you will have to overcome in the future to fully achieve your career goal?" Adequate space was provided for participants to list all of the barriers that they perceived. Coding of barriers included calculating the actual number of barriers (both past and present) cited by each participant as well as determining the types of barriers included in participants' responses.

Two graduate students enrolled in the University's counselor education program (both unaware of the study's purpose) coded the responses to the barrier questions. Categories of barriers (i.e., barrier types) were preselected based on prior research focusing on perceived occupational barriers among college students (Luzzo, 1993a, 1995, 1996b). Barrier types included family-related barriers (e.g., balancing work and family responsibilities, finding day care for children), study skills barriers (e.g., overcoming poor study habits, procrastination), ethnic discrimination barriers (e.g., dealing with job discrimination on the basis of race, differential treatment by teachers based on ethnic background), gender discrimination barriers (e.g., expectation of job discrimination on the basis of gender), financial barriers (e.g., lack of funds for completion of education), age discrimination barriers (e.g., expectation of discrimination based on one's age), and employment-related competition barriers (e.g.,

perceived difficulty in finding a job in a career field that is competitive). After the initial coding of responses (which yielded a 94% agreement rate between the two coders), barriers that were not placed into the same category by both coders were discussed until a consensus was reached regarding their placement.

### **Career Beliefs**

Participants' career beliefs were measured by the Career Beliefs Inventory (CBI; Krumboltz, 1991a). The CBI consists of 96 items answered on a 5-point continuum from strongly disagree (1) to strongly agree (5) with about half the items being reverse scored. There are 25 different scales included in the CBI. Standard scores on each scale range from 10 to 50, with higher scores indicating that the respondent generally agreed with the positive items included in that scale and disagreed with the scale's negative items. Lower scores for a given scale indicate at least some uncertainty about the belief represented by that scale. Although participants completed all CBI scales, only the six career beliefs hypothesized to be directly associated with perceived barriers and CDMSE (control, responsibility, career path flexibility, job experimentation, negotiating/searching, and working hard) were examined in this study.

Krumboltz (1991b) cited 3-month test-retest reliabilities for the CBI scales ranging from .26 to .68 (with a median of .52) for college samples. Cronbach's alpha reliability coefficients for the various CBI scales ranged from .28 to .85 (median of .54) for undergraduates included in the norming of the CBI. Internal consistency reliability in this range is considered respectable given the relatively small number of items in each scale (Wall, 1994).

Results of studies with college students have shown that the CBI measures information that is not tapped by aptitudes, vocational interest or personality inventories (Holland, Johnston, Asama, & Polys, 1993; Naylor & Krumboltz, 1994). Research also indicates the absence of meaningful gender and ethnic differences on the CBI (Holland et al., 1993; Krumboltz, 1991b). Expected relationships have been found between CBI scores and measures of anxiety (Carnell, as cited by Krumboltz, 1991b), career decidedness (Ryan-Jones, 1992), and vocational identity (Holland et al., 1993). Despite the relatively low internal consistency and test-retest reliability of the CBI, it has been characterized as having "impressive construct validity" (Holland et al., 1993, p. 242) and adequate convergent and discriminant validity to support its use in research (Fretz, Spokane, Nagel, Hoffman, Jaschik-Herman, & Davison-Aviles, 1994). The CBI is generally considered a valid tool for assessing an individual's career beliefs or assumptions that might interfere with sound career decisions (Holland et al., 1993; Wall, 1994).

### **Career Decision-Making Self-Efficacy**

The Career Decision-Making Self-Efficacy Scale--Short Form (CDMSES-SF; Betz, Klein, & Taylor, 1996) was used to measure participants' CDMSE. The CDMSES-SF evaluates an individual's degree of belief that she or he can successfully complete tasks necessary for making effective career decisions. The 25-item short-form was developed from the original 50-item version of the CDMSES (Taylor & Betz, 1983) in order to increase the scale's usefulness in counseling assessment and to provide a relatively brief pre-post measure for the evaluation of career interventions (Betz et al., 1996; Betz & Luzzo, 1996). Completion of the CDMSES-SF requires respondents to indicate the degree to which they are confident in

their ability to complete 25 different career decision-making tasks. Confidence ratings are made along a 10-point confidence continuum, ranging from 0 (no confidence at all) to 9 (complete confidence). Total scores on the CDMSES-SF are determined by summing the numerical responses to each item. Higher scores indicate higher levels of CDMSE.

Psychometric evaluations of the CDMSES-SF have revealed adequate reliability and validity of the scale, with a coefficient alpha value of .94, and significant concurrent validity correlations between the CDMSES-SF and measures of vocational identity and career certainty (Betz et al., 1996; Betz & Luzzo, 1996).

#### **Demographics Questionnaire.**

Participants reported personal information (age, sex, ethnicity, and year in college) by completing a brief demographics questionnaire prior to completing the CBI and the CDMSES-SF. The demographics questionnaire also included the two perceived barriers questions.

#### **Procedure**

At the beginning of the semester, a graduate student enrolled in the University's counselor education program (who served as a research assistant for this study) met with students enrolled in a history course and invited their participation in a study of career attitudes and beliefs. Potential participants were informed that they would be required to complete a series of questionnaires during the last 30 mins. of the class period and that the results would be useful in learning more about the career attitudes and beliefs of college students. Informed consent forms briefly outlining the study and informing students of their rights as participants (e.g., that they could withdraw from the study at any time without

jeopardy) were distributed to all students in attendance. Ninety-three percent of the students who were asked to participate signed the informed consent form, indicating their desire to participate in the study. Participants completed the demographic questionnaire and then completed the CBI and the CDMSES-SF in a counterbalanced order during the last 30 mins. of the class period. Following the data collection procedure, all students were debriefed regarding the purpose of the study. Because the focus of this investigation was on the career development of Mexican American students, only data from participants who indicated Mexican American ethnicity on the demographics questionnaire were included in the analyses.

### Results

A multivariate analysis of variance (MANOVA) was initially calculated to evaluate potential sex differences among the criterion variables in this study, including the six career beliefs (control, responsibility, career path flexibility, job experimentation, negotiating/searching, and working hard) and CDMSE. The results of the MANOVA revealed the absence of sex differences, Pillais  $F(7, 116) = 1.24, p > .05$ . Therefore, all subsequent analyses were conducted across levels of sex.

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Insert Table 1 about here

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Pearson product-moment correlation coefficients were calculated to determine the relationships between the numbers of past and future career-related barriers cited by participants, their career beliefs, and CDMSE. A Bonferroni correction was employed to account for the increased probability of committing a Type I error due to the multiple

correlation coefficients that were calculated. Therefore, a revised alpha level of  $.05/36$  (.001), where 36 represents the number of coefficients calculated, was used to determine statistical significance. Results indicated a significant, negative relationship between the number of perceived past and future barriers and the career beliefs of control [past barriers  $r = -.36$ ; future barriers  $r = -.33$ ] and responsibility [past barriers  $r = -.27$ ; future barriers  $r = -.28$ ]. These findings indicate that the more barriers perceived by participants, the less likely they were to believe that they have control over and responsibility for the career decision-making process. No other significant relationships between career-related barriers and the career beliefs measured by the CBI were found.

As shown in Table 1, results revealed the absence of a significant relationship between the number of past career-related barriers and CDMSE. A significant, negative relationship was revealed, however, between CDMSE and the number of future barriers perceived ( $r = -.32$ ,  $p < .05$ ). This inverse relationship, similar to results reported by Luzzo (1996b) for an ethnically-mixed sample of college students, indicates that the more future career-related barriers participants perceived, the lower their CDMSE was likely to be.

Descriptive analyses of participants' responses to the perceived barriers questions revealed certain types of career-related barriers perceived by a greater proportion of participants than other types of barriers. In terms of past barriers, 67% of the participants cited study skills barriers as having been an important part of previous career-related endeavors. Approximately one third of participants (35%) also cited financial barriers as part of their past. Relatively fewer participants cited family-related (19%), gender (15%), ethnic discrimination (12%), employment-related competition (11%), and age-related (6%) barriers of



the past. A similar trend was revealed for career-related barriers that participants expect to experience in the future. Study skills (68%) and financial concerns (49%) were the two future barriers cited by participants most often, with family-related (19%), employment-related competition (17%), ethnic discrimination (12%), gender (13%), and age-related (5%) barriers cited by fewer participants. These results are similar to those found in previous research (Luzzo, 1993; McWhirter, 1997) and support the notion that a large number of Mexican American college students believe that relatively weak study skills and significant financial concerns are likely to manifest themselves as barriers to the realization of career goals and vocational success.

Finally, results also revealed significant relationships between CDMSE scores and four of the career beliefs assessed in this study, including beliefs associated with control ( $r = .43$ ), responsibility ( $r = .31$ ), negotiating/searching ( $r = .27$ ), and working hard ( $r = .39$ ). Results generally indicate that the more confidence a student has for engaging in career decision-making tasks, the more adaptive her or his career beliefs are likely to be.

### Discussion

The results of this study provide evidence of a negative relationship between the career beliefs of control and responsibility and the number of career-related barriers perceived by participants. Significant, negative relationships were found between participants' sense of control over career decision making and the number of both past and future career-related barriers as well as between participants' belief in personal responsibility for career decision making and past and future career-related barriers. Findings suggest that Mexican American college students who exhibit relatively high levels of control and responsibility regarding

career decision making do not tend to perceive as many barriers to their career goals as their classmates who believe that they have little control over and responsibility for career decisions.

The discovery of a significant, negative relationship between the number of perceived barriers to future career development and CDMSE substantiates the results of earlier research (Luzzo, 1996b) and indicates that Mexican American college students who believe that they have several occupational barriers to overcome in the future are likely to exhibit lower levels of CDMSE (i.e., display less confidence in their ability to make career decisions) than students who do not envision as many barriers. It may be that persons who perceive substantial numbers of barriers associated with potential career goals simply begin to lack confidence in their ability to cope with such obstacles. As such, their CDMSE would appear lower than persons who perceive fewer barriers and who believe that such barriers can be overcome. It also may be that individuals who possess low CDMSE begin to develop a pessimistic outlook regarding career goal attainment and vocational success. Students who have very little confidence in their ability to successfully engage in career decision-making activities may eventually develop a belief system that reflects a lack of hope, a type of "learned helplessness" related to school and work. Even common career-related activities (e.g., writing a resume, completing a job application) might begin to seem like major obstacles or barriers. This type of a maladaptive attitude towards career decision making might result in Mexican American students' subsequent failure to engage in important career decision-making activities (e.g., career exploration and planning) during their college years. These and other possible reasons for the observed relationship between perceived career-

related barriers and CDMSE should be explored in future investigations, especially in light of the results of recent studies linking CDMSE to a variety of adaptive career-related behaviors and attitudes (Blustein, 1989; Luzzo, 1993b; Taylor & Popma, 1990).

Results of this study also substantiate prior research indicating that a substantial number of Mexican American college students perceive career-related barriers associated with study skills and financial concerns (Luzzo, 1993a). The majority of students who participated in this study believe that in order to fully realize their career aspirations they will need to overcome a variety of study skills barriers by developing appropriate time management skills and improving current study habits. A lack of money available to complete one's college education and the need to work full-time while attending college were the kinds of financial barriers participants included in their lists. Family barriers and employment-related competition associated with the future also were cited by approximately 20% of participants, indicating their awareness of the competition associated with many of today's more appealing occupations and the potential career planning challenges associated with multiple life roles (e.g., worker, parent).

Results also revealed significant relationships between several career beliefs and CDMSE among the participants. Positive relationships between CDMSE scores and the beliefs of control, responsibility, negotiating/searching, and working hard suggest that Mexican American college students who believe that they have control over the career decision-making process, believe that they are responsible for career decision making, believe that it is important to take constructive action in advancing career goals, and believe that hard work will bring success are much more likely to have confidence in their ability to engage in career

decision-making tasks (i.e., possess a high level of CDMSE) than their counterparts who do not possess such career beliefs.

### Counseling Implications

Given the observed relationships between the perceptions of career-related barriers, a sense of control over and responsibility for career decision making, and CDMSE, it seems imperative that career counselors who work with Mexican American clients begin to develop effective strategies for integrating a discussion of perceived barriers and career beliefs into the counseling process. For example, counselors might consider helping clients identify educational and occupational barriers that they [the clients] have overcome themselves in the past. Celebrating past successes might help clients recognize their ability to surmount occupational obstacles that are likely to be encountered in the future.

As far as the perception of future career-related barriers is concerned, the first step in the process would be to assist clients in identifying potential barriers. After identifying potential career-related barriers of the future, counselors could begin to work with their clients to develop various strategies for overcoming perceived barriers and to develop more adaptive beliefs about the career decision-making process. Counselors also might consider working with Mexican American students to assist them in the process of differentiating between real and perceived barriers, helping them to develop realistic perceptions related to occupational goals and career development.

Results of this investigation also suggest that counselors should engage in collaborative efforts designed to assist Mexican American college students as they attempt to overcome the maladaptive career beliefs they possess and the career-related barriers they

expect to encounter. By developing strategies and programs across campus that might foster a sense of control over and responsibility for career decision making, a campus climate that is more conducive to adaptive career development might be created. Given the large number of Mexican American students who cited study skills barriers as particularly relevant to career decision making, college counselors might want to develop workshops, psychoeducational seminars, and other modes of delivery to provide students with useful tools and strategies to employ in educational environments. Similarly, developing a database of educational funding opportunities in conjunction with other student services organizations (e.g., financial aid) and making such information readily available would provide students with helpful tools for addressing some of the financial barriers that they perceive. Collaborating with faculty who possess some degree of expertise in issues such as time management or family relationships to develop programs for students who are struggling with multiple role strain might help clients who view family-related barriers as potentially limiting factors in their career development. These types of collaborative relationships among student services constituencies on a university campus serve to emphasize the institutional commitment to meeting the needs of diverse student clientele.

Future research in this arena should attempt to correct some of the limitations present in this investigation that restrict the generalizability of the findings, such as the use of only first-year college students and the use of a relatively simplistic assessment of perceived barriers. Future studies also should focus on extending our knowledge of the role that perceived career-related barriers play in the career development of Mexican American students as well as in the career development of students from other ethnic backgrounds.

Creating and evaluating strategies for incorporating discussions of career-related barriers into the career counseling process will be especially important. Furthermore, there should be a concerted effort on the part of counseling professionals to broaden our understanding of the role that culture and ethnicity play in the career development of students from all backgrounds. Only when we make that type of commitment will our ability to meet the career development needs of a culturally diverse population be fully realized.

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Table 1

Correlational Matrix of Variables (N = 125)

Variables	1	2	3	4	5	6	7	8	9
1. CDMSE <sup>a</sup>	(.89)	-.19	-.32*	.43*	.31*	.17	.12	.27*	.39*
<u>M</u> = 172.89									
<u>SD</u> = 26.21									
2. No. of Past Perceived Barriers			-.56*	-.36*	-.27*	-.19	-.03	-.11	-.10
<u>M</u> = 1.52									
<u>SD</u> = 0.71									
3. No. of Future Perceived Barriers				-.33*	-.28*	-.20	-.10	-.03	-.12
<u>M</u> = 1.73									
<u>SD</u> = 0.74									
<u>Career Beliefs<sup>b</sup></u>									
4. Control				(.57)	.52*	.06	.12	.19	.43*
<u>M</u> = 36.2									
<u>SD</u> = 7.3									

Variables	1	2	3	4	5	6	7	8	9
5. Responsibility					(.49)	.09	.01	.18	.47*
<u>M</u> = 34.9									
<u>SD</u> = 7.4									
6. Career Path Flexibility						(.47)	.08	.08	.12
<u>M</u> = 31.6									
<u>SD</u> = 5.9									
7. Job Experimentation							(.63)	.36*	.12
<u>M</u> = 33.7									
<u>SD</u> = 6.3									
8. Negotiating/Searching								(.54)	.17
<u>M</u> = 39.7									
<u>SD</u> = 7.3									
9. Working Hard									(.74)
<u>M</u> = 37.3									
<u>SD</u> = 6.9									

Note. Alpha coefficients for the CDMSE-SF and each of the career beliefs scales are shown in parentheses along the diagonal.

<sup>a</sup>CDMSE scores range from 0-225, with higher scores indicating greater confidence in one's

ability to engage in career decision-making tasks.

<sup>b</sup> Career belief scale scores range from 10-50, with higher scores indicating agreement with the positive items included in that scale and disagreement with the scale's negative items.

\* $p < .001$ .

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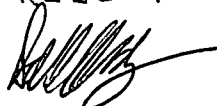
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Name: DARRELL ANTHONY LUZZO

Signature: 

Organization: ACT, Inc.

Position: DIRECTOR OF CAREER TRANSITIONS RESEARCH

Address: P.O. Box 168, IOWA CITY, IOWA 52243-0168

Zip Code: 52243-0168

Telephone No: 319/337-1223



Fax: 319/339-3020

E-mail: luzzo@act.org

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