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#### ABSTRACT

This study measured differences in the levels of career indecision for urban male and female high school seniors who had varying levels of experience in vocational programs or job related activities through school-to-work (STW) vocational programs. The 113 students, of whom 44% were male and 56% were female, completed the Career Decision Scale (CDS). The results determined that female students have lower career indecision than male students. A possible factor in higher career levels for high school females is that they may see their career options more narrowly than the males. A discussion is included on why several limitations of the study prevent generalization to all high school seniors. (Contains 25 references.) (JDM)



# A Quantitative Assessment of Gender and Career Decision-Making Confidence Levels of High School Seniors in a School-to-Work Program using the Career

#### **Decision Scale**

#### ABSTRACT

In this study, 113 high school seniors were administered the Career Decision Scale (CDS) which measured the differences between gender on career decisiveness levels of high school seniors. Quantitative analysis determined that female seniors had higher career decision confidence levels. Recommendations for further research regarding career decision-making and gender are discussed.

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A Quantitative Assessment of Gender and Career Decision-Making Confidence Levels of High School Seniors in a School-to-Work Program using the Career Decision Scale

#### Literature Review

Career counseling skills and career planning programs have been largely driven by career development theory which has historically been created by the process of studying predominantly White male samples with minimal application to women and minority members. For example Ginzberg and associates studied their first sample "...comprised of males from upper-middle-class, urban, Protestant or Catholic families of Anglo-Saxon origin, whose educational level ranged from sixth grade to graduate school" (Zunker, 1994, p. 27). One of the first career development research projects included a sample of 10,000 men who had been in the armed forces in World War II (Zunker, 1994).

Multicultural awareness in the counseling profession has brought focus to women and minority members in some career development theories. For example, Super has evolved his theory to include different types of career paths: linear for men, and cyclic for women (Zunker, 1994). Other examples are Gottfreson's Theory of Circumscription and Compromise, Krumboltz's Learning Theory of Career Counseling, and the Sociological Perspective on Work and Career Development (Brown, Brooks & Associates, 1996).

Historically women (like minority group members) have not been given career "...development opportunities equivalent to those available to majority group workers" (Dawis, 1996, p. 95). When women were allowed to work their career opportunities have been confined to jobs "...at the lower levels of the occupational hierarchy" (p. 95). Historically, American society has demonstrated the discouragement of women in the



work force, as established when laws were made preventing married women from working outside the home as the men returned from World War II (M. B. Waters, personal communication, October 13, 1998). More subtle discouragement continues to exist today with many working mothers feeling the lack of support from their families and community (as seen in most national media with regular occurrence).

Some cultures support working women and believe that husband and wife should have the same opportunity to work. Sweden, for example, has a "equal roles family model" (Berk, 2000) program in which child care centers are provided for all families by the government.

Women have increasingly become part of the work force since World War II, have done so before and during marriage, and with and without family obligations. The U.S. Department of Labor (1992) reported that by 1990, 57 million women who were 16 years and older were in paid work in the United States, and they project that women women's share of the labor force will increase from 46 percent in 1998 to 48 percent in 2008 (U.S. Department of Labor, 2001).

The labor force participation rate of males from 16 to 19 years of age with a high school education was 73.1 percent in 1996 compared to 65.6 percent of females in the same age group who were in the labor force. The rates were also similar in the male and female populations who had less than a high school education with 16-19 year old males and females represented in the labor force by 46.9 percent and 44.4 percent respectively (U.S. Department of Education, 1997).

Dropout rates for male and female high school students in 1996 were similar at 48.6 percent being male and 51.4 percent being female dropouts. Similarly, college



enrollment rates of males and females in 1996 were 60.1 percent and 69.7 percent respectively (U.S. Department of Education, 1997).

Early predictions that women would be increasing in numbers in college enrollment and employment seem to be accurate. The dropout rate also shows a narrowing gap of differences in gender behavior regarding high school commitment level. Currently women are earning more bachelor's and master's degrees that their numbers equal or exceed those earned by men, however, they continue to approach career development differently than men, earn less than men, and enter into traditionally female jobs (Hotchkiss & Borow, 1996).

Specific career areas in which percentages of women have increased since 1972 include engineering (from 0.8 to 9.6%), law (from 3.8 to 26.6), and business-executive and managerial (from 17. 6 to 43) although they only make up ten percent of senior management at big firms (Berk, 2000). In spite of these gains gender-typical messages influence a "decline in academically talented females' achievements and career expectations during high school and college" (Berk, 2000, p. 532) and in most career fields, women's achievements lag behind men's. Men are still writing more books, holding more leadership positions and producing more works of art. Women's progress in entering and excelling at traditionally male-dominated professions has increased, but is still very slow. "Women remain heavily concentrated in the less well-paid, traditionally feminine professions" (Berk, 2000, p. 534).

Some believe that, compared to Black men, Black women were at times able to take advantage of an oppressive situation because of their dual classification system of race and gender. "In the sixties...through collective effort, they struggled to make



substantial gains-in a way Black men were unable to do-in those occupations areas relegated to them. An outstanding example of this was the organization of the National Union of Hospital and Health Care Employees in 1969" (Giddings, 1984, p. 330). Medical settings (hospitals and nursing homes) are the largest employer for Black women. As Black women are making gains in the job market in terms of education and pay, generally speaking, they continue to work in traditionally feminine roles.

Black and White females define their identity through relationships with other women (Scott, 1991 & Robinson, 1985). These findings are an important connection with career development as personal identity and career choice is often related. Gottfredson (1996) explored women's career choice based on their perceptions of women's options from childhood. She assessed that a young child's identity development and career development begins when girls look to women to determine career options. If highly educated women are continuing to work in traditionally feminine careers the message to young girls, Black and White, is that we have pre-selected careers from which to choose.

In addition to the effect of role models on girls' career decision-making styles, attitudes about child rearing and marriage also have an effect. Vermeulen and Minor (1998) found gender role beliefs about parenting, marriage and career were central to the decision-making process of the rural women. The participants were women who had graduated in the upper 10 percent of their classes in high school. Conversely, men typically consider job status before marital status as priority in their lives.

Economic class status may also effect how high school girls and boys determine career choices. Hannah and Kahn (1989) studied grade 12 students in two urban schools where they were assured representation from high and low income areas. The findings



indicated that males predominantly selected male-dominated careers, while "high socioeconomic (SES) females were more likely than low SES females to choose maledominated occupations" (p. 161). Regardless of career prestige levels, both genders in the low SES group reported lower career expectations than the high SES group.

Academic achievement and self-confidence levels of adolescent female students are also indicators of career decision-making styles and confidence levels. Girls are often more confident and have higher grades through elementary and middle school than when they reach high school (Reis & Callahan, 1996). Studies conducted with gifted adolescent girls show self-efficacy levels which decline in high school (Kline & Short, 1991) and girls typically do not attribute their success to academic ability (Callahan, Cunningham & Plucker, 1994).

In one study, however, Spielhagen (1996) found that adolescent gifted females demonstrated pride in their potential and achievement. Similarly, Reis, Callahan & Goldsmith (1996) and Ratley, (1995) found the majority of their sample of poor Puerto Rican or African American female students to be able to demonstrate confidence in their abilities and attributed their success to their abilities. In this study, women prioritized their educational experience over dating and found support in their female peer groups.

Adolescent girls may be beginning to look at careers and prioritize jobs differently than their mothers. However, women are continuing to choose careers that fit their care-giving needs and adolescent girls are continuing to be socialized to make similar decisions.

School-to-Work



The School-to-Work (STW) movement began when the School-to-Work Opportunities Act was passed by Congress in 1994. Three strategies are currently being instituted by the National STW office to execute the national evaluation of STW programs. They include a survey of local STW Partnerships (from 1996-2000, a mail survey at the state level will collect data on the quality of partnerships, school and work activities, links to postsecondary options, student assessment and amount of student participation); case studies of selected sites in 42 partnerships in eight states; and a student study of 12th graders in 32 partnerships across the eight states previously mentioned conducted in the Spring of 1996, 1998 and 2000 (Hershey, 1999).

The high school under study was selected for its STW vocational programs, which include "Work-Based Learning Programs" involving cooperative education, internship, mentoring, and shadowing experiences. The full-time (12-month) coordinator of this program in an urban high school of about 1200 students also helps locate work (part-time, full-time and volunteer) for students. The student population includes African American, Asian, Hispanic, Native American, mixed race and White students.

#### Method

This comparative study measured differences in levels of career indecision for male and female high school seniors who have varying levels of experience in vocational programs or job related activities through the STW program at an urban high school. The sample had 44% males and 56% females. The following table illustrates the racial representation:



Count							
		RACE					
		BLACK OR		HISPANIC			
		AFRICAN		OR			
		AMERICAN	ASIAN	LATINO	WHITE	MIXED	Total
GENDER	MALE	8	4	1	30	4	47
	FEMALE	20	1	1	34	7	63
Total		28	5	2	64	11	110

#### **GENDER \* RACE Crosstabulation**

#### **Instrumentation**

Both a demographic survey and the Career Decision Scale (CDS) Osipow, Carney, Winer, Yanico & Koschier (1976) were administered to the sample. The demographic survey variables were technical or college path, career center attendance, guidance counselor visits, amount of involvement in STW programs (cooperative education, internship, mentoring, and shadowing experiences), work experience, post graduation plans, employment status of parents and parental level of education.

The CDS can estimate career indecision and assess the effects of career development interventions of high school students (Levinson, Ohler, Caswell & Kiewra, 1998). It measures levels of career indecision based on 18 test items and has been studied extensively in comparison to other career assessment tools. It is applicable to different age groups and has specific forms for various developmental stages. Vondracek (1991) describes the CDS as an inventory that not only measures indecision but also helps determine whether the indecision is based on internal or external forces as well as the degree of indecision. The inventory has ability to help counselors understand the



structure of indecision as well as to help career guidance administrators measure the effectiveness of a career-planning program (Harman, 1985).

Reliability data of two-week and six-week test-retest studies show .90 and .82 respectively (Harmon, 1985). Another test-retest study reported high values of .90 for the two-week interval and .82 for 59 individuals enrolled in a college course (Slaney, 1985).

Validity has been shown through a number of studies which report increased decidedness after career planning sessions (Harmon, 1985). In a study comparing treatment and control group test scores, (one of the most significant studies using an untreated control group), it was shown that "Pre- and posttest measures over eight months showed the career planning group to be initially less decided...and to have become significantly more decided. After the intervention they were no different from the initially more decided control group" (Harmon, 1985, p. 270).

Concurrent validity, construct validity, and predictive validity have been shown (Watson, Foxcroft & Stead, 1991; Osipow, 1987). Harman (1985) reports validity and reliability with test-retest reports offering excellent effect size significance.

In a group comparison to test validity Osipow and Schweikert (1981) explored differences in scores between the CDS and the Assessment of Career Decision Making (ACDM). In a sample of college freshmen in a career planning center program, tests were given during a two-day period before the semester began. A significant correlation (r= -.265, p < .004) was found between Indecision scores on the Career Decision Scale and the ACDM (Osipow & Schweikert, 1981).

There have been few studies that have focused on comparing career decisionmaking skills between cultures. Westbrook, Cutts, Madison and Arcia (1980) reported



finding higher levels of indecision in Blacks than in Whites. Most studies utilizing the CDS have used predominantly White samples (e.g. Savickas & Jarjoura, 1991) or westernized, White South African adolescents (e.g. Stead & Watson, 1993; and Watson, Foxcroft, & Stead, 1991), or samples which do not describe an ethnic breakdown (Perkins, 1994). Slaney (1985) suggests that since the CDS has been so well received that more research with focus on ethnic differences needs to be pursued.

#### Findings

The null hypothesis stated that there are no differences in levels of career indecision (scores on the CDS) between male and female 12th grade students. The ANOVA showed significant differences between genders (p < .014).

ANOVA
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CDS SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	542.020	1	542.020	6.227	.014
Within Groups	9661.714	111	87.042		
Total	10203.735	112	_		

The mean CDS score was 32.6 for males and 28.19 for females, indicating that female seniors had significantly lower career indecision than the males. The null hypothesis was rejected.

#### Discussion

This study found that the female students have lower career indecision than male students. There are many hypotheses as to why this finding occurs in this and other studies (e.g. Perkins, 1994), and researchers need to continue to examine the variables that effect gender career indecision. If women are beginning to match men in high school dropout rates, labor force participation rate, and college enrollment, researchers must



attempt to determine how they form decision-making skills in order to choose jobs and careers. A possible factor in higher career confidence levels for high school girls is that they may see their career options more narrowly than boys. This may be due to girls continuing to have women role models that pursue traditionally feminine careers (Berk, 2000).

Adolescent girls' academic confidence levels still seem to decrease as they enter senior high school. If academic achievement and confidence levels are linked with the career decision-making process, it is particularly important that researchers attempt to determine factors that contribute to the decline in confidence.

Limitations to this study should be considered. The convenience sample drew a number of male and female students who were not representative of the high school population under study. This study is not generalizable to the high school senior population. Data from this sample and analysis of this information are useful for contribution to the literature of gender issues and career counseling but must be considered cautiously. Finally, even though career decision levels were assessed, factors which may cause gender affected decision-making skills could be incorporated into a study such as this in order to strengthen the findings.



#### References

Berk, L. E. (2000). <u>Child development (5<sup>th</sup> ed.)</u>.Needham Heights, MA: Allyn Bacon.

Brown, D., Brooks, L., & Associates (1996). <u>Career choice and development.</u> San Francisco, CA: Jossey-Bass Publishers.

Callahan, C. M., Cunningham, C. M., & Plucker, J. A. (1994). Foundations for the future: The socio-emotional development of gifted, adolescent women. <u>Roeper</u>. <u>Review, 17(2), 99-105</u>.

Dawis, R. V. (1996). The theory of work adjustment and person-environmentcorrespondence counseling. In D. Brown, L. Brooks & Associates, (Eds.), <u>Career choice</u> <u>and development, 3rd edition</u>, (pp. 75-120). San Francisco, California: Jossey-Bass Inc.

Giddings, P. (1984). <u>When and where I enter.</u> New York: William Morrow and Company, Inc.

Gottfredson L. S. (1996). Gottfredson's theory of circumscription and compromise. In D. Brown, L. Brooks & Associates, (Eds.), <u>Career choice and</u> <u>development, 3rd edition</u>, (pp. 179-232). San Francisco, California: Jossey-Bass Inc.

Hannah, J. S. & Kahn, S. E. (1989). The relationship of socioeconomic status and gender to the occupational choices of grade 12 students. Journal of Vocational Behavior, 34, 161-178.

Harmon, L. W. (1985). Review of career development. In J. V. Mitchell, Jr. (Ed.), <u>The ninth mental measurements yearbook</u>, (pp. 270-270). Lincoln, Nebraska: Buros Institute of Mental Measurements of the University of Nebraska-Lincoln.



Hershey, A. M. (Ed.). (1999, February 5-last update). <u>Research and Evaluation</u>. [Homepage of National School-to-Work Learning and Information Center], [On-line]. Available: http://www.stw.ed.gov [1999, February 5].

Hotchkiss, L., & Borow, H. (1996). Sociological perspective on work and career development. In D. Brown, L. Brooks & Associates, (Eds.), Career choice and

development, 3rd edition, (pp. 281-334). San Francisco, California: Jossey-Bass Inc.

Kline, B. E., & Short, E. B. (1991). Changes in emotional resilience: Gifted Adolescent females. <u>Roeper Review, 13(3)</u>, 118-121.

Levinson, E. M., Ohler, D. L., Caswell, S., & Kiewra, K. (1998). Six approaches to the assessment of career maturity. <u>Journal of Counseling and Development, 76</u>, 475-482.

Osipow, S. H. (1987). <u>Career Decision Scale manual (Rev. ed.)</u>. Odessa Fla: Psychological Assessment Resources.

Ospiow, S. H., Carney, C. G., Winer, J., Yanico, B., & Koschier, M. (1976).

Career Decision Scale. Odessa, Fl: Psychological Assessment Resources, Inc.

Osipow, S. H., & Schweikert, D. (1981). <u>The Career Decision Scale: A test of</u> <u>concurrent validity.</u> Psychological Reports, 48, 759-761.

Perkins, N. R. (1994). <u>Career and high school seniors: Comparing students in the</u> <u>tech prep and general programs of study.</u> Unpublished doctoral dissertation, University of South Carolina, Columbia.

Reis, S. M., & Callahan, C. M. (1996). My boyfriend, my girlfriend, or me: The dilemma of talented teenage girls. <u>The Journal of Secondary Gifted Education</u>, 7(4), 434-466.



Reis, S. M., & Callahan, C. M., & Goldsmith, D. (1996). Attitudes of gifted adolescents toward their achievement, education and future. In K. D. Arnold, K. D.

Noble., & R. F. Subotnik (Eds.), <u>Remarkable Women: Perspectives on Female Talent</u> Development (pp. 209-224). Cresskill, NJ: Hampton Press.

Robinson, C. R. (1985). Black women: A tradition of self-reliant strength. In J. H. Robbins, and J. R. Siegel, (Eds.), <u>Women changing therapy: New assessments, values and</u> <u>strategies in feminist therapy</u> (pp. 135-144). New York: Harrington Park Press.

Savickas, M. L., & Jarjoura, D. (1991). The Career Decision Scale as a type indicator. Journal of Counseling Psychology, 38, 85-90.

Scott, K. Y. (1991). The habit of surviving. New York: Ballentine Books.

Slaney, R. B. (1985). Career Decision Scale. In D. J. Keyser, & R. C. Sweetland,

(Eds.), <u>Test critiques, volume II</u>, (pp. 138-143). Kansas City, Missouri: Westport Publishers, Inc.

Spielhagen, F. (1996). Case studies of talented females. In K. D. Arnold, K. D. Noble, & B. F. Subotnik (Eds.), <u>Remarkable women: Perspectives on female talent</u> <u>development</u> (pp. 198-208). Cresskill, NJ: Hampton Press.

Stead, G. B., & Watson, M. B. (1993). How similar are the factor structures of the career decision scale, the career decision profile, and the career factors inventory? Educational and Psychological Measurement, 53, 281-290.

U.S. Department of Education. (1997). <u>Digest of education statistics 1997</u> (U.S. Department of Education Office of Educational Research and Improvement No. NCES 98-015). Washington, DC: Author.



U.S. Department of Labor (2001). <u>Employment projections</u>. [Homepage of BLS], [On-line]. Available: http://stats.bls.gov/news.release/ecopro.nr0.htm

U.S. Department of Labor, Women's Bureau (1992). <u>Women workers: Outlook to</u> 2005. Washington, DC: U.S. Government Printing Office.

Vermeulen, M. E., & Minor C. W. (1998). Context of career decisions: Women reared in a rural community. <u>The Career Development Quarterly</u>, 46, 230-245.

Vondracek, F. W., (1991). Osipow on the Career Decision Scale: Some comments. Journal of Counseling and Development, 70, 327.

Watson, M. B., Foxcroft, C. D., & Stead, G. B. (1991). Factor analysis of the career decision scale on South African high school students. <u>Psychological Reports, 69</u>, 1083-1088.

Westbrook, B. W., Cutts, C. C., Madison, S. S., & Arcia, M. A. (1980). The validity of the Crites' Model of Career Maturity. <u>Journal of Vocational Behavior, 16,</u> 249-281.

Zunker, V. G. (1994). <u>Career counseling: Applied concepts of life planning</u> (4th ed.). Pacific Grove, CA: Brooks/Cole Publishing Company.





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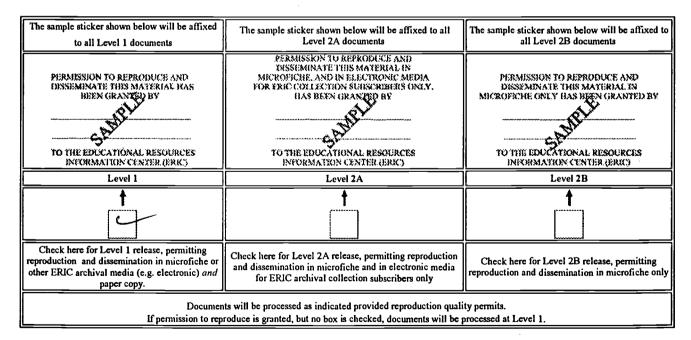
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