DOCUMENT RESUME

ED 456 606 EC 308 591

AUTHOR ElHessen, Souraya Sue

TITLE Self-Efficacy and Career Choice among Students with Physical

Disabilities in Postsecondary Education.

PUB DATE 2001-04-14

NOTE 8p.; Paper presented at the Annual Meeting of the American

Educational Research Association (Seattle, WA, April 10-14,

2001).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Career Counseling; *Career Exploration; *Career Planning;

College Students; Counseling Techniques; *Decision Making; Expectation; Higher Education; *Physical Disabilities; *Self

Efficacy; Self Esteem; Self Motivation; *Severity (of

Disability)

ABSTRACT

This paper discusses the findings of a study that explored the role of self-efficacy and career decision-making in students with physical disabilities engaged in the career planning process. The relationships of career decision-making self-efficacy to adjustment of disability, severity of disability, and career exploration behaviors were examined in 128 students with physical disabilities attending two two-year colleges and one four-year college in California. Findings revealed that, as predicted, students with physical disabilities who scored high on career decision-making self-efficacy engaged in more career exploration behaviors. As hypothesized, there was a positive correlation between adjustment to disability and career decision-making self-efficacy. Severity of disability was a significant predictor of levels of career decision-making self-efficacy and adjustment to disability. There were no significant differences in levels of career decision-making self-efficacy among students in two-year colleges and those in the four-year college. Implications for career counseling practice and suggestions for future research are discussed. Career counselors are urged to use performance accomplishments, vicarious learning or modeling, anxiety management techniques, and verbal persuasion encouragement to generate intervention programming designed to promote career search self-efficacy expectations and evaluate their effectiveness. (Contains 17 references.) (CR)



Self-Efficacy and Career Choice Among Students with Physical Disabilities in **Postsecondary Education** Paper Presented at American Educational Research Association,

U.S. DEPARTMENT OF EDUCATION EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization

☐ Minor changes have been made to improve reproduction quality.

official OERI position or policy.

Points of view or opinions stated in this document do not necessarily represent

Seattle, Washington **April 14, 2001** By Dr. Souraya Sue ElHessen, Ed.D

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Hessen

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Abstract

It has been suggested that self-efficacy expectations may have a cognitive influence on career decision making (CDM) and vocational achievement (e.g., range of career options and persistence in career exploration). Personal self-efficacy expectations may influence the CDM process and career motivation. This study explored the role of self-efficacy and career decision making in students with physical disabilities engaged in the career planning process. The relationships of career decision-making self-efficacy to adjustment of disability, severity of disability, and career exploration behaviors were examined in 128 students with physical disabilities attending two 2-year colleges and one 4-year college in California.

Findings revealed that, as predicted, students with physical disabilities who scored high on career decision-making self-efficacy engaged in more career exploration behaviors. As hypothesized, there was a positive correlation between adjustment to disability and career decision-making self-efficacy. Severity of disability was a significant predictor of levels of career decision-making self-efficacy and adjustment to disability. There was no significant difference in levels of career decision-making self-efficacy between students in 2-year colleges and those in the 4-year college. Implications for career counseling practice and suggestions for future research are discussed.

Purpose

The primary purpose of this investigation was to examine the relationship between career decision-making self-efficacy, adjustment to disability, severity of disability and career exploration behaviors among students with physical disabilities. Based on Bandura's self efficacy theory and career decision-making theories as a framework, it was hypothesized that (a) students with physical disabilities at a four-year college will have a higher career decision-making self efficacy than students at a two-year college; (b) students with physical disabilities that have a high career decision-making self efficacy will engage in more career exploration behaviors; (c) students who have adjusted to their physical disability will have a higher career decision-making self efficacy; (d) male students with a physical disability will have a higher career decision-making self efficacy than female students with a physical disability; and (e) students who perceive themselves as severely disabled will have a lower career decision-making self efficacy and will be less adjusted to their disability.

BEST COPY AVAILABLE



Theoretical Framework

In the career development domain, self-efficacy expectations are hypothesized to influence an individual's attitudes and behaviors as they directly apply to the Career Decision Making (CDM) process. Hackett and Betz (1983) were the first to suggest that self-efficacy expectations may have an important cognitive influence on their career decision-making (CDM) and vocational achievement (e.g., range of career options and persistence and career exploration). They propose that personal self-efficacy expectations influence the CDM process and the career motivation of women and men. Research with college students has revealed consistent support for the relationship between career self-efficacy beliefs and various indexes of career development (Betz and Hackett, 1983; Lent, Brown, and Larkin, 1986; Lent, et al., 1987; Taylor and Pompa, 1990; Wheeler, 1983). Hackett and Betz (1981) applied the concept of self-efficacy to career development research. Their research has shown that self-efficacy is an important topic of research when studying careers because it was found to be a predictor of career choice and may regulate whether a person will initiate and maintain certain career behaviors.

Taylor and Betz (1983), in one of their first investigations assess the utility of Bandura's self-efficacy theory to the understanding and treatment of career indecision. They discuss the merits of such integration by focusing on the advantage of the direct relationship of self-efficacy expectations in the design, implementation, and evaluation of intervention strategies. They argued that the assessment of self-efficacy expectations with regard to CDM tasks and behaviors would provide specific behavioral targets for intervention based on the sources of efficacy information (e.g., performance accomplishments and the vicarious learning) or delay, as describe by Bandura (I 977a).

As previously noted, Bandura (1977b) hypothesized a direct link between self-efficacy expectations and behavioral performance. Higher levels of self-efficacy are more likely to be associated with increased frequency and successful performance of behavior then are lower levels of self-efficacy. Therefore, a persons self-efficacy expectations regarding CDM (i.e., a person's CDM self-efficacy) should predict her or his actual performance in making career decisions. Determining the extent to which expectations of the efficacy are related to effective decision-making among students with disabilities, is one of the most important questions yet unanswered in the application of self-efficacy theory to the CDM domain (Hackett and Betz, 1981; Lent and Hackett, 1987; Robbins, 1985). Theories of Career Development are founded upon personal choice and personal involvement concerning the selection of a career path and subsequent education, training and job attainment (Assouline & Meir, 1987; Elton & Smart, 1988). However, problems exist in applying career development approaches produced for nondisabled persons to persons with disabilities.

Methods

The participants at the study were students with physical/mobility impairments currently enrolled at a two-year and four-year college. A total of 582 surveys were mailed to students, and 128 surveys were received. Four questionnaires were used to measure the outcomes of this study. Career Decision-Making Self-Efficacy Short Form (CDMSE-SF) is a 25-item measure (Taylor and Betz, 1983) assesses self-efficacy precepts with regard to career decision-making. Career



decision-making self-efficacy can be defined as a confidence a person has for completing tasks necessary to make career decisions. The *Adjustment to Disability Scale* was a 10 item scale designed and developed by the author measures adjustment disability that includes six factors of adjustment: 1) architectural barriers; 2) social adjustment; 3) adjustment to daily living activities; 4) emotional psychological adjustment; and five) religion and spirituality, as well as 6) professional in career adjustment. The *Career Exploration Behaviors/Demographic* questionnaire includes general information such as gender, age, major, number of units completed as well as a 10-item checklist of career preparation activities. Participants were asked to indicate a yes/no format as each behavior is completed. Finally, the *Severity of Disability* questionnaire was specifically designed to address functional mobility in relationship to home, school, work and the community. Three factors were considered: 1) frequency -the portion of time an individual uses an accommodation to move about: 2). Extent-the degree the individual experiences pain, fatigue, exacerbation of or limited range when moving about; 3) Environment- the degree the individual is restricted to or by certain settings due to terrain, geographic location, temperature, lighting or transportation.

Procedure And Data Collection

The director's of disabled student services from two community colleges and one four-year college were contacted for their support to use students with physical disabilities currently registered with the disabled student services office. In early spring 2000 a letter of introduction to the study and the researcher was sent, along with a packet of questionnaires to the identified students enrolled in disabled student services. Students were giving a three-week timeline to complete the surveys and return in a stamped, self-addressed envelope. A total of 582 surveys were mailed. Reminder postcards were mailed several weeks after the original packet urging students to complete the surveys in a timely manner. As the results a total of 128 surveys were received.

Research Design And Data Analyses

This study was a correlational research design with three control variables (2 year vs. 4 year college students, gender, and age) and 4 outcome variables (adjustment and severity to disability, self-efficacy, and career behaviors). It examined the cause and effect relationship of two and four year college students with physical disabilities in career decision-making self-efficacy and adjustment to disability and severity of disability as pertains to career choice. The dependent variables are CDMSE, career exploration behaviors, and adjustment to disability severity of disability and the independent variables are 2-year vs. 4-year colleges, age and gender.

Data Analysis

In accord with the purpose of this study and nature of the correlational design, one-way ANOVA's were used to observe the differences between each of the dependent variables on the independent variables. In order to conduct the one-way ANOVA analyses the dependent variables (CDMSE, adjustment to disability, severity disability, and career behaviors), that were continuous variables were converted into categorical variables. Also, age an independent variable was



converted into a categorical variable. Post hoc comparisons were conducted using the Fisher (LSD) method to examine the significant effects. The correlations between the seven measures of this study were conducted to investigate the relationship of these variables. Following a significant effect a regression analysis was conducted to investigate which variable significantly contributed to the R.

Results and Conclusions

Summary of the Findings

This investigation revealed a significant relationship between career decision-making self-efficacy and career exploration behaviors, F(2, 109) = 5.14, p = .000. The regression analysis revealed a significant relationship between career decision-making self-efficacy and career exploration behaviors, R = .26. There was a significant relationship between adjustment to disability and career decision-making self-efficacy, F(2, 109) = 26.34, p = .000. There were significant mean differences in adjustment scores between groups that were rated high, medium, and low in career decision-making self-efficacy. There were significant differences between adjustment disability scores among groups according to degree of severity of disability, F(2, 109) = 7.48, p = .001. The regression analysis revealed that adjustment to disability was a significant predictor of career decision-making self-efficacy and severity of disability among students with physical disabilities, R = .72.

There were no significant relationships between gender or 2-year versus 4-year college attendance and career decision-making self-efficacy. However, there were significant relationships between both severity of disability and adjustment to disability and decision-making self-efficacy. There were significant mean differences in adjustment to disability between high and low groups of career decision-making self-efficacy, p = .05. A one-way ANOVA revealed significant mean differences in severity of disability among all adjustment to disability groups, F(2, 109) = 8.58, p = .000. A regression analysis revealed that severity of disability had a direct relationship with adjustment to disability; thus, severity of disability was a predictor of the level of adjustment to disability, $R^2 = .17$, F = 11.40, P = .000.

In the additional analyses, the one-way ANOVA revealed significant mean differences in severity of disability by age groups, F(4, 108) = 3.49, p = .01. A one-way ANOVA revealed significant differences in adjustment to disability by age groups, F(4, 108) = 3.21, p = .01. There were also significant mean differences in career exploration behaviors by age, F(4, 104) = 3.33, p = .01. There were also significant differences in severity of disability by accommodations, F(4, 104) = 6.19, p = .000. There were significant group differences in career exploration behaviors according to the level of adjustment to disability, F(2, 109) = 3.10, p = .05. Regression analysis revealed that adjustment to disability and career exploration behaviors were significant predictors of levels of career decision-making self-efficacy, F(2, 100) = 16.11, F(3, 100) = 16.11

This study provides empirical support for three of the five hypotheses: (a) students with physical disabilities that have a high career decision making self-efficacy will engage in more career exploration and behaviors; (b) students who have adjusted to their physical disability will have a higher career decision making self-efficacy; (c) students who perceived themselves as



severely disabled will have a lower career decision making self-efficacy and will be less adjusted to their disability.

The findings from this study are relevant to the design and delivery of career exploration interventions for students with physical disabilities. Career decision-making self-efficacy was a significant predictor of career exploration behaviors, thus those students who scored high in the CDMSE-SF scale were persistent in career exploration activities. There were significant mean differences among age groups and career exploration behaviors. Older students with physical disabilities were more likely to engage in career exploration behaviors than younger students.

Students, who scored high on both the adjustment to disability scale and the career decision-making self-efficacy scale, had a higher expectancy that certain career behaviors can secure specific outcomes (i.e., occupational pursuits). As Burkhead and Cope (1984) postulated that students with physical disabilities cope more effectively and creatively than college students who are not disabled. One explanation is that those students with disabilities who to attend college may represent the most mature and self determined of the population in contrast to a more heterogeneous grouping of ability and motivation among the non-college disabled. This study demonstrated that students who perceived themselves as severely disabled were less adjusted to their disability and were less confident in their career decision-making ability. Adjustment to disability was significant variable in both CDMSE and severity of disability. Being adjusted to a disability means being able to obtain satisfactions within the limits imposed by the disability (Russel, 1981). As a result, students who were less adjusted underestimate their ability to effectively make career choices based on self-knowledge of their capabilities to perform specific career tasks.

Educational Importance Of The Study

The findings of this study have several implications for college students. First, they support previous research (summarized by Betz and Luzzo, 1996) showing the important relationship of career decision-making self-efficacy expectations to career indecision, thus, one obvious starting point for assisting undecided students involves intervention based on four sources of efficacy information in Bandura's (1977a, 1986) self-efficacy theory. These sources of information, which can be structured by the counselor, are: performance accomplishments, vicarious learning or modeling, anxiety management techniques, and verbal persuasion encouragement (for example of the counselor). Using these four sources, counselors can generate intervention programming designed to promote career search self-efficacy expectations and evaluate their effectiveness. For example, promoting mastery experiences can be achieved by having an individual practice various career search activities such as networking and personal exploration activities. For more complex behavior routines such as interviewing, experiences that include observing others practice interviewing may be warranted.

Currently there is not a universally accepted career decision-making self-efficacy tool for counselors to use when counseling students with physical disability. Hackett (1991) states, "one of the major limitations of past research on career self-efficacy and a serious drawback for self-efficacy applications to career counseling, has been the absence of a general measure useful under a variety of circumstances" (p. 330). The career decision-making self-efficacy scale along with adjustment to disability and severity disability questionnaires, can be used as assessment tools to facilitate insight and discussion between career counselor and clients. Career counselors can



use these instruments to help determine whether a student is under estimating or overestimating his or her ability with respect to the desired career goal.

References

- Assouline, M., & Meir, E. (1987). Meta-analysis of the relationship between congruence and well-being measures. *Journal of Vocational Behavior*, 31, 319-332.
- Bandura, A. (1977a). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1977b). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ: Prentice-Hall.
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options college women and men. *Journal of Counseling Psychology*, 28, 399-410.
- Betz, N. E., & Luzzo, D. A. (1996). Career assessment and the Career Decision Making Self-Efficacy Scale. *Journal of Career Assessment*, 4, 413-428.
- Burkhead, E. J., & Cope, C. S. (1984). Career maturity and physically disabled college graduates. *Rehabilitation Counseling Bulletin*, 28, 142-150.
- Elton, C. F., & Smart, J. C. (1988). Extrinsic job satisfaction and person environment congruence. *Journal of Applied Vocational*, 32, 226-238.
- Hackett, G. (1991). Career self-efficacy measurement: Reactions to Osipow. *Journal of Counseling and Development*, 70, 330-331.
- Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. Journal of Vocational Behavior, 18, 326-339.
- Hackett, G., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22, 63-81.
- Lent, R. W., Brown, S. D., & Larking, K. C. (1986). Self-efficacy in the prediction of academic performance and perceived career options. *Journal of Counseling Psychology*, 33, 265-269.
- Lent, R. W., & Hackett, G. (1987). Career self-efficacy: Empirical status and future directions [Monograph]. *Journal of Vocational Behavior*, 45, 79-122.
- Robbins, S. B. (1985). Validity estimates for the Career Decision-Making Self-Efficacy Scale. Measurement and Evaluation in Counseling and Development, 18, 64-74.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecisions. *Journal of Vocational Behavior*, 22, 63-81.



- Taylor, K. M, & Popma J. (1990). An examination of the relationships among career decision-making self-efficacy, career salience, locus of control, and vocational indecisions. *Journal of Vocational Behavior*, 37, 17-31.
- Wheeler, K. G. (1983). Comparisons of self-efficacy and expectancy models of occupational preferences for college males and females. *Journal of Occupational Psychology*, 56, 73-78.





U.S. Department of Education
Office of Educational Research and Improvement (OERI) National Library of Education (NLE)
Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOC	UMENT IDENTIFICATION				
Title: \$2	A-Efficacy and chysical Disabili	ties in lost-se	condary	tudents with Education	
Author(s): Jouraya J	ue t Hessen	., Ed.D.		
Corporat	re Source:			Publication Date:	
II. REF	PRODUCTION RELEASE:				
monthly a and elect	ibstract journal of the ERIC system, Re	sources in Education (RIE), are usually C Document Reproduction Service (El	made available to use	community, documents announced in the ers in microfiche, reproduced paper cope to the source of each document, and,	
If perm of the pag		eminate the identified document, please	CHECK ONE of the follo	owing three options and sign at the botton	
The sample sticker shown below will be affixed to all Level 1 documents		The sample sticker shown below will be affixed to all Level 2A documents		The sample sticker shown below will be affixed to all Level 2B documents	
PER	MISSION TO REPRODUCE AND EMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE DISSEMINATE THIS MATERIA MICROFICHE, AND IN ELECTRONI FOR ERIC COLLECTION SUBSCRIBI HAS BEEN GRANTED BY	AND L IN C MEDIA ERS ONLY, MIC	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN ROFICHE ONLY HAS BEEN GRANTED BY	
_	sande		_	sample	
	HE EDUCATIONAL RESOURCES FORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOU INFORMATION CENTER (ER		TO THE EDU CAT IONAL RESOURCES INFORMATION CENTER (ERIC)	
Level 1		Level 2A		Level 2B	
		1		†	
reproduction	here for Level 1 release, permitting n and dissemination in microfiche or other hival media (e.g., electronic) and paper copy.	Check here for Level 2A release, per reproduction and dissemination in microl electronic media for ERIC archival or subscribers only	iche and in rep	Check here for Level 2B release, permitting production and dissemination in microfiche only	
		ents will be processed as indicated provided repr produce is granted, but no box is checked, docur		evel 1.	
	as indicated above. Reproduction fro	m the ERIC microfiche or electronic no ne copyright holder. Exception is made for	nedia by persons other	produce and disseminate this documen r than ERIC employees and its system on by libraries and other service agencies	
Sign Signature:			Printed Name/Position/Title:	/Position/Title:	
here, → please	Organization/Address:	e Elhessen, EdD	Telephone: 562 - 866 - 52	LIS FAX: _	
ERIC	Performance 9433 ive	e Consultant	E-Mail Address: S.e. 1 hessen & Worldnet a	Date: 4/26/01.	
	Bellflower	. CA 90706	-01 (011-01-0	trinet (over	

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:
IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:
If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:
Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

University of Maryland
ERIC Clearinghouse on Assessment and Evaluation
1129 Shriver Laboratory
College Park, MD 20742

Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility

1100 West Street, 2nd Floor Laurel, Maryland 20707-3598

Telephone: 301-497-4080 Toll Free: 800-799-3742 FAX: 301-953-0263

e-mail: ericfac@inet.ed.gov WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 9/97)

