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An Examination of the Relationship between Career Decision-Making Self-Efficacy and Susceptibility to External Influences: Locus of Control, Decision-Making Style, and Coping Style

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AN EXAMINATION OF THE RELATIONSHIP BETWEEN CAREER DECISION-MAKING SELF-EFFICACY AND SUSCEPTIBILITY TO EXTERNAL INFLUENCES: LOCUS OF CONTROL, DECISION-MAKING STYLE, AND COPING STYLE

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CHAPTER I

Introduction

Although Social Learning approaches have only recently begun to contribute to career psychology, they are quickly gaining support as a valuable framework for furthering our understanding of career development processes (Krumboltz, Mitchell, & Jones, 1976: Mitchell & Krumboltz, 1984; Osipow, 1983).

Social Learning Theory was evolved into "Social Cognitive Theory" by Bandura (1986) in order to emphasize that the theory encompasses psychosocial phenomena that extend beyond the issues of learning and conditioning that are traditionally focused on in learning paradigms. The Social Cognitive Theory is a triadic model in which behavior, cognitive and other person factors, and environmental events all interact reciprocally as determinants of one another (Bandura, 1986). The theory has as one of its central foci the examination of self-referent thought in human functioning. It is this aspect of Social Cognitive Theory, specifically Bandura's (1977, 1982, 1986) Self-Efficacy Theory and its application to the career domain, that has been gaining empirical attention and offers promise for career psychologists in understanding, investigating, and ultimately facilitating career development (Betz & Hackett, 1986; Osipow, 1986).

Lent and Hackett (1987) stress the importance of conducting research to study the relationship between career self-efficacy and other cognitive, career-related variables. The present study will respond to this

suggestion by examining the relationship between career decision-making self-efficacy and selected cognitive factors, namely: locus of control, decision-making style, and coping style. A measure of the degree of importance on the career expectations of significant others will also be included in this portion of the investigation.

The author identified locus of control, decision-making style, coping style, and degree of importance placed on the career expectations of others as variables that may be indicative of how susceptible a person is to external influences when making career decisions. This will play two parts in the present study. First, the idea that there is actually only one susceptibility to external influences factor rather than one for each of the above variables will be investigated. Second, a number of studies have shown that there are gender differences in how susceptible people are to the opinions of family, friends, and society with regard to each of these susceptibility to external influences variables (Taylor, 1982; Phillips, Friedlander, Pazienza & Kost, 1985; O'Hare & Beutell, 1987). This thesis contends that these gender differences can be accounted for primarily by differences in people's levels of career decision-making self-efficacy. All in all, it is expected that it is not one's gender that determines how one will respond to these influences; the determining factor in susceptibility to external influence is expected to be one's level of career decision-making self-efficacy.

CHAPTER II

Review of Related Literature

Self-Efficacy Theory

According to Bandura's (1986) Social Cognitive Theory, self-efficacy beliefs are the predominant causal mechanism involved in guiding important aspects of psychosocial functioning. Bandura (1986) defines self-efficacy expectations as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance" (p. 391). Overall, low self-efficacy expectations regarding a behavior or behavioral domain lead to avoidance of those behaviors, and increases in self-efficacy expectations should increase the frequency of approach versus avoidance behavior (Bandura, 1977).

Efficacy expectations, and their consequences, are said (Bandura, 1986) to vary on dimensions of level, strength, and generality. Level and strength are hypothesized as helping to determine the degree of difficulty of tasks an individual feels capable of attempting, whether behavior will be initiated, the amount of effort expended, the amount of persistence maintained, and the durability of efficacy expectations when the individual is confronted with disconfirming or dissuading experiences. Generality involves the degree to which expectations of personal efficacy transfer to different behavior domains.

In Bandura's (1986) view, self-efficacy is seen as a dynamic aspect of the self-system that is specific to a given domain. Further, self-efficacy

is a personal judgment about capabilities and skills possessed. Self-efficacy beliefs are not interchangeable with objectively assessed skills. Thus, based on their differential self-efficacy beliefs, individuals with similar objective skills may achieve performances of varying quality (Bandura, 1986).

According to Bandura (1986), there are four major sources of efficacy information: personal performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. It is through continual interaction with these sources that self-efficacy judgments are acquired and modified. Bandura (1977, 1986) notes that personal performance accomplishments are the most powerful source of efficacy information.

According to the theory, accurate and strong expectations of personal efficacy are crucial to the initiation and persistence of behavioral performance in all aspects of human development (Bandura, 1986). Because of the importance of vocational pursuits to an individual's emotional, psychological, economical, and social welfare, it seems crucial to examine the role self-efficacy expectations have in the career development process (Lent and Hackett, 1987).

Hackett & Betz (1981) were the first to propose that self-efficacy might be an important variable to include in models of career development for men and women. In their extension of Self-Efficacy Theory to the career domain, Hackett and Betz (1981) focused specifically on gender-differences in access to the primary sources (Bandura, 1986) of efficacy

information. These gender-differences were proposed to result from differential sex-role socialization of men and women. Hackett and Betz's (1981) causal hypotheses about the relationship of socialization to career choices are equally applicable to men and women. However, highlighting the central mediational role of self-efficacy, they emphasized the special importance of these hypotheses to predictive models of women's career development.

Hackett and Betz (1981) cite the following as examples of sources of efficacy information influencing women: differential skill acquisition due to personal performance accomplishment opportunities; lack of encouragement by significant others to pursue non-gender-stereotypical endeavors; external attributions of success; and stereotyping in the media, and educational and occupational materials. As a result of these influences, women may be more likely to develop and maintain low or weak expectations about their perceived range of career options, effective career plans or choices. Hackett and Betz (1981) further suggested that these socialization-based differences may be a causal factor influencing women's under-utilization of their career talents and their under-representation in many male-dominated careers, especially higher status, higher paying fields.

In the first empirical study of career self-efficacy, Betz and Hackett (1981) examined gender differences in self-efficacy with regard to the educational requirements and job duties of 10 traditionally male and 10 traditionally female occupations across the six Holland (1985) themes.

Results indicated that college males' efficacy expectations were equivalent across traditionally male and female occupations, but that women's efficacy beliefs varied according to the gender-appropriateness of the occupation, with higher efficacy expectations than men for traditionally female occupations and lower efficacy expectations for male-dominated occupations.

Layton (1984) found that women's self-efficacy for traditionally female occupations was significantly higher than their self-efficacy for nontraditional fields, and that these differences were moderately correlated with the range of traditional and nontraditional careers considered. Efficacy expectations for nontraditional occupations were also significantly related to nontraditional major choices, and self-efficacy for nontraditional fields surpassed interests, ability, and various background variables in predicting choice of nontraditional college majors.

Post-Kammer and Smith (1985) found gender differences in the self-efficacy of their junior and senior high subjects for certain traditionally male and female occupations; they also found significant relations between self-efficacy and vocational interests. Post-Kammer and Smith's subjects, however, reported gender differences in self-efficacy across fewer occupations than did Betz and Hackett's (1981) subjects, and self-efficacy did not offer as much incremental utility in predicting range of occupational consideration. This difference may be due to the age differences in the two subject groups.

In their second study, Post-Kammer and Smith (1986) modified Betz and Hackett's (1981) original instrument by adding four math-related occupations, and investigated gender differences in math-oriented and non-math-oriented occupations. Regression analyses revealed that both self-efficacy and vocational interest contributed significantly to the prediction of both math-related and non-math-related occupational consideration for women, but only interests were predictive of occupational consideration for men. Post-Kammer and Smith (1986) suggested that women may be more strongly influenced than men by self-efficacy in considering occupations.

Contrary to the research findings already discussed, Lent, Brown, and Larkin (1984) did not find male-female differences in career self-efficacy ratings. These findings must be interpreted cautiously, however, because the students in this study were already focused primarily on nontraditional female careers in engineering or the sciences. Subjects in the other studies represented a wider array of career majors. Due to the relative homogeneity of their sample, the men and women in the sample of Lent et al. (1984) may have had more similar efficacy building experiences than women and men in the general population.

With the exception of Lent et al. (1984) all of these findings (Betz & Hackett, 1981; Layton, 1984; Post-Kammer & Smith, 1985, 1986) support two of the Hackett and Betz (1981) propositions: that self-efficacy is significantly related to occupational choices in women; and that gender differences in self-efficacy are predictive of gender differences in

occupational consideration for certain types of occupations. Contrary to their (Hackett & Betz, 1981) expectations, however, self-efficacy was not predictive of career exploration behavior. Betz and Hackett (1981) explained this contradiction by pointing out that self-efficacy measures are domain specific (Bandura, 1986). A measure of self-efficacy regarding occupational titles might not relate highly to career exploration behavior. They suggest that the assessment of self-efficacy with specific respect to career exploration or decision-making behaviors might provide a fairer test of the relationship of self-efficacy to exploration or decisional behavior.

Career Decision-Making Self-Efficacy

The research on career self-efficacy reviewed thus far has focused mainly on the content dimension of career choice, or what the individual considers or chooses: academic major or occupation. Self-efficacy researchers, however, did follow Hackett and Betz's (1981) suggestion to explore the process dimension of career choice, or how decisions are made. This section will address this dimension of career choice by discussing research that has applied self-efficacy theory to the understanding of career decision-making behavior. Further, it is this aspect of career choice, career decision-making self-efficacy (CDMSE), that is the central focus of the present study.

The first study to examine a process dimension of career behavior from a self-efficacy perspective was the examination of CDMSE conducted by Taylor and Betz (1983). Taylor and Betz designed the

Career Decision-Making Self-Efficacy Scale according to Bandura's (1977) theory which posits that efficacy expectations are estimates of a person's confidence in successful mastery of behaviorally specific tasks. Each item of the CDMSE scale is considered to be a task or behavior associated with career decision-making. Following Crites's (1973) model for career choice competencies, the scale was composed of five subscales: Goal Selection, Occupational Information, Problem Solving, Planning, and Self-Appraisal. Sets of 10 items were written for each scale. Thus, the CDMSE scale provides five subscales and an overall scale score.

Taylor and Betz (1983) tested the predictive validity of the CDMSE scale with college students and found that CDMSE was significantly related to vocational indecision. Persons with lower levels of confidence in their capacity to accomplish specific skills and activities necessary for career decision-making exhibited higher levels of vocational indecision. The strongest contributor to the prediction of career indecision was the total CDMSE score.

With regard to gender differences, Taylor and Betz (1983) found that male and female college students reported equally strong self-efficacy expectations with regard to career decision-making tasks. No gender differences on either the subscales or the total CDMSE scale were evident. Also of interest are the findings that self-efficacy did not relate highly to academic ability, and that results of a factor analysis of the CDMSE scale items indicated that the five hypothesized factors didn't

work as predicted. One general factor for the domain of career decision-making tasks and behaviors emerged, rather than the five separate dimensions that guided development of the scale.

A study by Robbins (1985) looked at the construct validity of the CDMSE scale. His results were similar to those of Taylor and Betz (1983). They indicated that higher self-efficacy regarding career decision-making skills is associated with less career indecision, and that the CDMSE scale is a measure of generalized career self-efficacy rather than a measure of self-efficacy beliefs for specific career decision-making behaviors.

Taylor and Popma's (1990) study gives further support to the Taylor and Betz (1983) and Robbins (1985) findings. Their factor analysis also indicates that the CDMSE scales may best be characterized as a generalized career self-efficacy measure, and they too found that CDMSE is moderately and negatively related to vocational indecision. This relationship and the finding that only the CDMSE scale was a significant predictor of vocational undecidedness suggest that levels of CDMSE are significantly predictive of career indecision.

One aspect that was missing from the Robbins (1985) and Taylor and Popma (1990) studies was evidence concerning gender differences. As the records stand, there are no gender differences with regard to the CDMSE scale, but further research either supporting or disconfirming Taylor and Betz's (1983) results is necessary.

CDMSE may also be of particular importance to women's career development. In a study by Nevill and Schlecker (1988), the relationship between CDMSE and willingness of women to engage in traditional or nontraditional career activities was investigated. They found that strong CDMSE expectations were related to willingness to engage in the career-related activities of nontraditional occupations, but not traditional ones. However, regardless of level of CDMSE, their subjects were more willing to engage in the career-related activities of traditional occupations.

Locus of Control

The psychological construct known as "locus of control" first came into prominence with the publication of a monograph by Rotter (1966). In this publication, Rotter presented a scale he had constructed within the context of the Social Learning Theory which was developed to assess an individual's generalized expectancies for internal versus external control of reinforcement. Internal control refers to the perception of an event as contingent upon one's own behavior or one's relatively permanent characteristics. External control, however, indicates that a positive or negative reinforcement following some action of the individual is perceived as not being entirely contingent upon his or her own action but as the result of forces outside the individual, or as due to chance, fate, or luck (Anastasi, 1988).

Taylor found gender differences in how susceptible people are to external influences with regard to locus of control when career decision-making difficulties are evident. Taylor's (1982) study investigated the

relationship between locus of control and level of vocational indecision in college students, and the extent to which this relationship is moderated by gender. Her findings indicated that while locus of control was, in general, related to vocational indecision, the strength of the obtained relationship varied as a function of gender. For males, statistically significant results were not obtained with regard to the relation of locus of control to vocational indecision. For females, however, statistically significant results were obtained. Greater externality was significantly related to higher levels of indecision among female students.

Taylor and Popma (1990), on the other hand, support the idea that differences in how susceptible people are to external influences with regard to locus of control are related to self-efficacy and career decision-making difficulties. They, however, did not take gender differences into consideration. Their study examined the relationship between locus of control, vocational indecision, and CDMSE. Taylor and Popma (1990) found a moderate negative relationship between locus of control and CDMSE indicating that the more external a person's locus of control the less confidence he/she has in his/her ability to perform career decision-making tasks, and they found that the CDMSE scale was the only variable that significantly predicted vocational indecision. Locus of control was not predictive of vocational indecision.

The results of these studies indicate that locus of control relates to both career indecision and CDMSE. Just what that relationship is and how it relates to susceptibility to external influences still remains unclear,

however, because while Taylor (1982) was looking at gender differences, Taylor and Popma (1990) were looking at differences in CDMSE.

Decision-Making Style

Decision-making style is another variable that has been recognized as a critical factor in an individual's vocational behavior (Harren, 1979). Harren (1979) postulated that decision-making style is an individual's characteristic mode of perceiving and responding to decision-making tasks, and he identified three decision-making styles: Rational, Intuitive, and Dependent. These styles represent the degree to which an individual takes personal responsibility for decision-making as opposed to projecting responsibility onto someone or something else, and the degree to which a person uses logic versus emotional strategies in decision-making.

The Rational style involves systematic appraisal and logical deliberation with an expanded time perspective. The rational decider takes responsibility for his/her decision-making; gathers and weighs information about him/herself and the situation in a realistic, thorough, and objective manner; and anticipates the consequences of previous and current decisions (Harren, 1979).

The Intuitive style also involves taking responsibility for decision-making, but the strategies are quite different from the rational style. This style is characterized by consideration of emotional factors, often in an impulsive manner. Intuitive deciders rely heavily on fantasy, attention to present feelings, and emotional self-awareness. Decisions are often said

to "feel" right while the decider cannot necessarily explain how his/her decision was made (Harren, 1979).

As opposed to the Rational and Intuitive styles, the dependent decider allocates responsibility for choice to external events or other people. He/she is said to be passive and heavily influenced by his/her environment or the expectations of others. Dependent deciders may be impulsive, fatalistic, delaying, compliant, agonizing, or paralyzed when it comes to making decisions. (Harren, 1979)

The extent to which one endorses these styles is estimated by the rationally constructed Assessment of Career Decision Making (ACDM) (Harren, 1976). Phillips, Friedlander, Pazienza, and Kost (1985) examined the factorial validity of the items composing the decision-making style scales of the ACDM (Harren, 1976). Their results provide support for the validity of the instrument's decision-making style items and for the taxonomy on which its scales are based. Phillips et al. (1985) found that the three orthogonal factors that emerged from their analysis corresponded to the Rational, Intuitive, and Dependent decision-making style constructs that are supposed to be estimated by the instrument. In contrast to previous research that found no gender differences with respect to decision-making strategies (Lunneborg, 1978; and Harren, Kass, Tinsley, & Moreland, 1978), Phillips et al. (1978) found that females may endorse the Dependent and Intuitive decision-making styles significantly more often than do males.

Due to the mixed results concerning the presence of gender differences with regard to decision-making styles, it is clear that a replication of this investigation is warranted. Further, no studies were found that investigated decision-making style in relation to CDMSE.

Coping Style

Research on career decision-making and career indecision has established that anxiety plays an inhibiting role in completing the career decision-making process (O'Hare & Tamburri, 1986). It only seems natural that if an individual learns to cope with anxiety he/she can make a more effective career decision. In this study, coping will be defined as cognitive and behavioral efforts to manage the internal demands that tax on an individual's career decision-making resources (Lazarus & Folkman, 1984). O'Hare and Tamburri (1986) identified four coping factors based on a factor analysis of the Van Sell, Latack, & Schuler Coping Scale (1980). These coping factors included Self-Efficacy Behavior, Symptom-Altering/Avoidant Behavior, Reactive Behavior, and Support-Seeking Behavior.

O'Hare and Beutell (1987), using the same sample as O'Hare and Tamburri (1986), did a study addressing gender differences in coping with regard to making career decisions. First, they looked at whether or not there are gender differences in the strategies used to cope with the career decision-making process. Their results indicated the following gender differences: 1) Men Scored significantly higher than women on Self-Efficacy Behavior; 2) Women scored significantly higher than men on

Reactive Behavior and Support-Seeking Behavior. No significant difference was found for Symptom-Altering/Avoidant Behavior.

O'Hare and Beutell (1987) also investigated the relationship between the coping factors and career indecision for men and women. These results showed men and women to have very similar relationships with these two variables. For both genders, Self-Efficacy Behavior was found to be negatively related to career indecision, and Symptom-Altering/Avoidant Behavior was found to be positively related to career indecision. Neither Support-Seeking nor Reactive Behavior was found to be significantly related to career indecision for either gender.

Although men and women differed on the coping factors, the patterns of relationships between the coping factors and career indecision were virtually identical for men and women. Self-Efficacy Behaviors were inversely related to career indecision. One important implication of these findings is that both men and women should be encouraged to use Self-Efficacy coping behaviors.

Very few studies have focused on the role of coping in the career decision-making process (O'Hare & Tamburri, 1986). No literature was found discussing the relationships between coping style and career self-efficacy, and O'Hare and Beutell (1987) was the only study that considered gender differences in coping style with regard to career decision-making. Further research considering all of these aspects is necessary. The present study will provide additional data concerning gender differences and how coping style relates to CDMSE.

Summary

To summarize, the current review reaffirms the earlier observation that there is growing empirical support for the extension of the self-efficacy aspect of the Social Cognitive Theory to the understanding of career development (Betz & Hackett, 1986; Osipow, 1986). More specifically, these studies warrant the following conclusions: (a) career self-efficacy is significantly related to career choice, particularly in women; (b) for certain types of occupations, gender-differences in career self-efficacy are predictive of gender-differences in occupational consideration; (c) since self-efficacy measures are domain specific, self-efficacy theory must be applied to the content and process aspects of career development using domain specific assessments; (d) no gender differences with regard to CDMSE are evident; (e) level of CDMSE is related to degree of vocational indecision (i.e. higher self-efficacy with regard to career decision-making skills is related to less career indecision); (f) the CDMSE scale significantly predicts vocational undecidedness; (g) and locus of control, decision-making style, and coping style are all related to career decision-making.

This study extended the research on CDMSE, decision-making style, locus of control, and coping style in the following ways: First, this investigation explored how these four constructs as well as the measure of degree of importance placed on the career expectations of others were related to one another. Particular attention was paid to how each variable relates to CDMSE. Second, since the reviewed studies concerning

gender-differences have yielded mixed results, this study sought to assess for gender-differences across all areas of interest. Third, this investigation looked for evidence that indicates that any apparent gender differences found in decision-making style, locus of control, coping style, and degree of importance placed on the career expectations of others could be accounted for by differences in CDMSE. Fourth, all of the factors indicating susceptibility to external influence were examined to assess whether they consisted of a single external susceptibility factor.

Basic Research Questions

1. Is there one factor that encompasses susceptibility to external influences rather than one for each of the following: importance of others' expectations for career decisions, decision-making style, locus of control, and coping style?
2. Are there gender differences in any of the instruments used in this study? Can the gender differences reported in locus of control by Taylor (1982), in decision-making style by Phillips et al. (1978), and in coping style by O'Hare and Beutell (1987) be replicated? Can the gender differences that appear be explained by differences in CDMSE?
3. What is the relationship between CDMSE and each of the variables used in this study? Are persons with low CDMSE beliefs more susceptible to external (i.e. family, friends, and society) influences during the process of making career decisions? Are the expectations of others negatively related to CDMSE beliefs?

CHAPTER III

Method

Subjects

Sixty-eight subjects, 43 female and 25 male college students, were utilized in the present study. The majority of the sample were in their first year of college (N = 33, 48% of the total sample) with each subsequent year represented in decreasing frequency (second year: N = 21, 31%; third year: N = 9, 13%; fourth year: N = 4, 6%; other: N = 1, 2%). The age range of the subjects was 18-43 years, however, the majority (N = 59, 87% of the total sample) corresponded with their academic status by falling between 18-20 years. On questions inquiring about the status of the subjects' choice of major, most of the subjects stated that they had chosen a major (N = 47, 69% of the total sample). The remaining 31% (N = 21) stated that they had not decided on a major yet. The sample was almost split down the middle as far as status of choice of occupation was concerned (N = 37, 54% stated that no occupation had been chosen; and N = 31, 46% stated that they had chosen an occupation). The sample was predominantly White (N = 43, 63% of the total sample) with the following representation from the other racial groups: Black: N = 4, 6%; Asian: N = 12, 18%; Native American: N = 3, 4%; Other: N = 6, 9%. All the subjects were enrolled in a general psychology course at a large Midwestern university and received course credit for their participation.

Procedures

A sign-up folder for this study was placed with all of those from other on-going studies requesting subjects from the University Introduction to Psychology Subject Pool. Students indicated that they would participate in this study by signing their name under the appointment (date, time, and location) of their choice. An examiner met the subjects in groups according to their appointments, distributed the questionnaire packets, and waited for the subjects to complete and turn in their packets. Upon turning in their packets, the subjects received a "Study Summary" which explained the purpose of the study and provided sources they could refer to if they wanted more information. See Appendix B for a copy of the "Study Summary."

The questionnaire packets contained a Background Information Form, an Importance of Others' Expectations for Career Questionnaire, the Assessment of Career Decision Making Scale, the Internal-External Scale, the Coping Scale, the Bem Sex Role Inventory, the Career Decision-Making Self-Efficacy Scale, and a Traditionality of Significant Others Questionnaire (See Appendixes C through J for copies of the questionnaires and assessment instruments).

Instruments

The Background Information Form (BIF) contained standard demographically oriented questions; age, gender, and ethnicity. It also asked subjects to indicate their year in college; high school and college grade point averages; the status of their major and occupational

decidedness; the college major they chose, or those they are considering; the occupation they chose, or those they are considering. Finally, the BIF asked subjects to give reasons for their choices or considerations with regard to the occupations they indicated.

The Importance of Others' Expectations for Career Questionnaire (IOEC) is a five-item questionnaire that asked the subjects to rate how important each item was to his/her choice of career. This rating was obtained on a 7-point scale ranging from Not Important at All (1) to Extremely Important (7). The purpose for including this questionnaire was to get a rating of how susceptible each subject was to the external career expectations of his/her mother, his/her father, his/her most important female friend, his/her most important male friend, and society.

The Assessment of Career Decision Making Scale (ACDM) (Harren, 1976) was used to assess each subject's career decision-making style. It identifies each subject's career decision-making style as Rational, Intuitive, or Dependent. A reliance on the Dependent decision-making style indicates susceptibility of external influences. The ACDM contains 30 true-false items. Subjects were asked to respond to each item in terms of whether it was true of how he/she generally makes decisions. Harren et al. (1978) reported the following test-retest reliability estimates for the three decision-making scales: Rational= .85, Intuitive= .76, and Dependent= .85.

The Internal-External (I-E) Scale (Rotter, 1966) is a forced-choice, self-report inventory. This scale was used to assess each subject's locus

of control (internal versus external). The I-E Scale consists of 29 paired statements, six of which are filler items. Subjects are asked to choose the statement in each pair for which they hold the strongest belief. An I-E Scale score is computed by summing those items which indicate a belief in an external locus of control. High scores indicate an external locus of control and low scores indicate an internal locus of control. Scores may range from 1 to 23. A high score, showing a more external locus of control, indicates susceptibility to external influences. Rotter (1966) reported test-retest reliability coefficients of r= .60 for males and r= .83 for females over a one month interval. Over a two month interval, coefficients of r= .49 for males and r= .61 for females were reported. The instrument was also found to exhibit moderate internal consistency reliability coefficients ranging from .65 to .79.

The Coping Scale (Van Sell, Latack, & Schuler, 1980) consists of 54 items representing the major typologies of coping behaviors and strategies. Subjects were asked to make their responses on a 5-point scale ranging from Hardly Ever Do This (1) to Almost Always Do This (5) with regard to how they personally react to their career decision concerns. This scale was used to identify what type of coping behavior (O'Hare and Tamburri, 1986) each subject employs; Self-Efficacy, Reactive, Avoidant, or Support-Seeking. Employment of the Support-Seeking coping style indicates susceptibility to external influences. Latack (1986) reported reliability estimates (alphas ranging from .52 to .85) and evidence of

construct validity for the Van Sell et al. measure of coping. Evidence of discriminant and convergent validity was also found.

The Bem Sex Role Inventory (BEM) (Bem, 1974) is a personality test designed to measure the masculinity-femininity psychological construct. The BEM was used to measure gender role orientation. The inventory provided scores for both Masculinity and Femininity that reflect the degree to which an individual endorsed qualities associated with the male and female gender roles. When completing the BEM, subjects were asked to describe themselves according to the 60 personality characteristics listed by using a 7-point scale ranging from Never or Almost Never True (1) to Always or Almost Always True (7). Studies (Bem, 1981) of the internal consistency of the BEM yielded a coefficient of .87 for a sample of college men, and coefficients of .77 and .78 for two samples of college women. A 4-week test-retest reliability study yielded a coefficient of .90 (Bem, 1981). The data collected from this inventory will not be used in this study. It will be used in another study involving this sample population.

The Career Decision-Making Self-Efficacy Scale (CDMSE) (Taylor & Betz, 1983) was used to assess each subject's level of CDMSE. Each of the 45 items in the CDMSE scale represents a task indicative of one of the five career choice competencies derived from Crites's (1981) theory of career maturity; self-appraisal, occupational information, goal selection, planning, and problem solving. For each task listed the subjects were to indicate how much confidence they have that they could accomplish the

task. The confidence ratings were done according to a 10-point scale ranging from No Confidence At All (0) to Complete Confidence (9). Taylor and Betz (1983) reported that the CDMSE scale has high internal consistency reliability with an alpha coefficient of .97 and item-total score correlations ranging from .50 to .80.

The Traditionality of Significant Others Questionnaire (TSO) provided a rating of how traditional (with regard to the roles women and men should hold in society) each subject perceived the beliefs of the following people to be: his/her mother, his/her father, his/her most important female friend, his/her most important male friend, and him/herself. The subjects were asked to rate each item on a 7-point scale ranging from Not Traditional At All (1) to Extremely Traditional (7). The data collected from this questionnaire will not be used in this study. It will be used in another study involving this sample population.

Analysis of Data

In order to see if one Susceptibility to External Influences (SEI) factor would emerge, (1) z-scores were computed for each scale score or total score of the susceptibility to external influences measures to provide standardized scores, and (2) a principle components factor analysis with varimax rotation was performed on all of the z-scores.

In order to determine if there were gender differences, analysis of variance were computed for each of the following instruments and instrument scales: the IOEC total score; the Rational, Intuitive, and Dependent scales of the ACDM; the I-E Scale; the Efficacy, Avoidant,

Reactive, and Support-Seeking scales of the Coping Scale; and the CDMSE.

In order to examine to relationship among the variables utilized in this study a series of Pearson product-moment correlation coefficients were computed comparing all of the measures. Particular attention was paid to the relationship between the CDMSE and each of the following instruments and instrument scales: the SEI factor(s); the IOEC total score; the Rational, Intuitive, and Dependent scales of the ACDM; the I-E Scale; and the Efficacy, Avoidant, Reactive, and Support-Seeking scales of the Coping Scale.

The preceding analysis were used to provide either new information or a replication of prior investigations with regard to the relationship of CDMSE to other career-related cognitive variables. This study did the same with regard to psychometric work looking at gender differences. Also important was the investigation looking for one SEI factor to emerge from instruments said to assess four separate external influence factors.

CHAPTER IV

Results

Gender Differences

No gender differences were found for any of the instruments or instrument scales. See Table 1 (Appendix J) for a summary of these analysis of variance results. All in all, it is concluded that no significant gender differences were found for any of the variables in question.

Susceptibility to External Influences

Pearson correlation results of the examination of the relationship between each of the susceptibility to external influences variables: the 4 coping style scores from the Coping Scale, the IOEC total score, the 3 decision-making style scores from the ACDM, and the I-E Scale total score are presented in Table 2. These results clearly indicate that many of these variables are intercorrelated. In order to understand the relationship between susceptibility to external influences and CDMSE, it was necessary to assess whether these variables converge and discriminate from each other in any meaningful way. Thus, a z-score was computed for each of the variables, and a principle components analysis of these standardized factors was performed. The results of the analysis are presented in Table 3.

A principle components analysis followed by varimax rotation, extracted three Susceptibility to External Influences (SEI) factors. These three factors accounted for 65% of the total variance with factors 1 through 3 accounting for 30, 22, and 13% of the variance respectively.

TABLE 2

Correlation matrix of the Susceptibility to External Influences variables: Career Decision-Making Style (1-3), Locus of Control (4), Coping Style (5-8), and IOEC (9).

	Variables							
Variables	1.	2.	3.	4.	5.	6.	7.	8.
1. Rational	---							
2. Intuitive	55***	---						
3. Dependent	05	07	---					
4. Locus of Control	17	14	27**	---				
5. Efficacy	51***	04	14	23	---			
6. Reactive	68***	22	06	04	61***	---		
7. Avoidant	16	33**	37**	18	08	03	---	
8. Support-Seek	21	07	20	06	36**	46***	26*	---
9. IOEC	12	15	19	02	13	22	17	41***

Note. Decimal points were omitted. Underlined values indicate negative correlations.

*p < .5, **p < .01, ***p < .001.

The order, by size of loading, in which each variable contributed to its factor is presented in Table 4.

Pearson Correlations

Results of the examination of the CDMSE scale with the three SEI factors are presented in Table 4. As shown, a moderately strong positive relationship was found between Factor 1 and the CDMSE scale. This

TABLE 3

Rotated Factor Matrix of External Influence Variable Z-Scores: Coping Scale (C.), IOEC, ACDM (D.), and I-E Scale.

	Factors		
Variables	1	2	3
C. Support-Seeking	.79980		
IOEC Total	.64692		
C. Efficacy	.59285		
D. Rational		.86363	
D. Intuitive		.80240	
C. Reactive	.58825	.65786	
D. Dependent			.78148
I-E Scale Total			.71225
C. Avoidant			.50747

Note. Loadings smaller than .4 were omitted. An underlined value indicates a negative figure.

indicates that the more one uses the Support-Seeking and Efficacy coping styles, and the more importance one places on the career expectations of significant others; the more one will express confidence in one's ability to master career decision-making skills. Further, a moderately strong negative relationship was found between Factor 3 and the CDMSE scale. This relationship suggests that the more a person relies on the Dependent decision-making style and the Avoidant coping style, and the more external a person's locus of control, the less confidence he/she will express in his/her ability to complete career decision-making tasks. No significant relationship was found between Factor 2 and CDMSE.

The results of the examination of the CDMSE scale with the variables of major decidedness, vocational decidedness, importance of

TABLE 4

Correlation Matrix of CDMSE with SEI Factors (1-3).

	Factors		
	1	2	3
CDMSE (58)	.2612*	.1741	-.4515**

Note. N is in parentheses.

*$p < .05$, **$p < .001$.

others' expectations for career, decision-making style, locus of control, and coping style are presented in Table 5. No relationship was found between major decidedness and the CDMSE scale. Vocational decidedness, on the other hand, was found to have a moderately strong and positive relationship with the CDMSE scale. This indicates that students who are vocationally decided expressed more confidence in their ability to complete career decision-making tasks. In addition, the moderate positive relationship found between the CDMSE scale and the Rational decision-making style suggests that those who employ Rational decision-making strategies may be more likely to express higher career decision-making self-efficacy beliefs. In turn, the moderate negative relationship found between the CDMSE scale and the Dependent decision-making style indicates that those who employ a more Dependent decision-making strategy may express less confidence in their ability to complete career decision-making tasks.

A moderately strong negative relationship was found between locus of control and CDMSE. This indicates that the more external a person's locus of control the lower his/her CDMSE expectations will be.

With regard to the Coping Scale, a moderately strong positive relationship was found between the CDMSE scale and the Efficacy coping style. This suggests that confidence in one's ability to complete career decision-making tasks coincides to a significant degree with confidence in one's ability to produce a desired effect in a coping situation. A moderate positive relationship was also found between the CDMSE scale and the

Support-Seeking coping style indicating that the more one employs a Support-Seeking coping style, the higher one's CDMSE. Due to the type of support-seeking behaviors assessed by the Coping scale, in a career decision-making context, support-seeking may be interpreted as a form of gathering information about careers and one's self.

TABLE 5

Correlation Matrix of Career-Related Variables and CDMSE.

	N	CDMSE
Major Decidedness	67	.23
Vocational Decidedness	67	.31**
ACDM Rational	64	.25*
ACDM Intuitive	64	-.14
ACDM Dependent	65	-.34**
Locus of Control	67	-.35**
Cope Efficacy	65	.55***
Cope Reactive	67	.21
Cope Avoidant	64	-.12
Cope Support Seeking	67	.32**
IOEC Total	67	.09

Note. An underlined value indicates a negative figure.

*p < .05, **p < .01, ***p < .001.

CHAPTER V

Discussion

In view of the results of this study, the hypothesis that there is one susceptibility to external influences factor rather than one for each of the variables investigated was supported. However, the hypothesis that gender differences in how susceptible people are to the opinions of family, friends, and society can be accounted for by differences in people's levels of career decision-making self-efficacy was not supported as no gender differences were found.

In addition, the results of this study provide a three-fold contribution toward the understanding of the career decision-making self-efficacy construct. First, the study extends prior career decision-making self-efficacy research by including the following career-related variables: importance placed on the career expectations of significant others, coping style, decision-making style, and locus of control. Second, the results provide preliminary information with regard to assessing a person's level of SEI and with regard to examining the relationship between CDMSE and SEI. Third, the investigation provides new, substantiating, and refuting information with regard to gender differences in the examined career-related variables. The following sections will focus on discussing the implications for career counseling generated by the data addressing these three contributions. This will be followed by a discussion of the limitations of the current research and suggestions concerning future research.

CDMSE and Other Career-Related Variables

Examination of the significance of the relationships between CDMSE and the other cognitive, career-related variables confirmed the previous finding that there is a moderate positive relationship between CDMSE and vocational decidedness. In this study as well as several others (Taylor and Popma, 1990; Robbins, 1985; Taylor and Betz, 1983), CDMSE was found to be the only significant predictor of vocational decidedness. This result provides evidence that knowing students' levels of CDMSE may aid in providing them with appropriate career interventions. The present study's examination of the relationship between locus of control and CDMSE also achieved confirming results. It replicates Taylor and Popma's (1990) finding of a significant negative relationship between Locus of Control and CDMSE. Results from both studies indicate that the more external a person's locus of control the less confidence he/she has in his/her ability to perform career decision-making tasks. These results suggest that career counselors should encourage the development of an internal locus of control for their clients experiencing career decision-making difficulties. By helping clients perceive that events and outcomes are contingent on their own behavior, those experiencing career decision-making difficulties may begin to understand the importance of mastering career decision-making tasks. The emotional arousal this realization creates can be a great motivator for practicing career decision-making behaviors. Personal performance

accomplishments achieved through practice under a career counselor's guidance will increase a client's CDMSE.

In addition to confirming previous findings, the results of the present study provide some new information. Relatively little research attention, if any, has been focused on assessing the relationship between CDMSE and the following career-related variables: importance placed on others' expectations for career decisions, coping style, and decision-making style. Thus, results of each of these examinations make a significant contribution to CDMSE research.

The importance placed on the career expectations of others was suspected to have a significant negative relationship with CDMSE. This relationship would have suggested that those who place more importance on the career expectations of others would have lower CDMSE beliefs. This, however, was not the result achieved. No relationship was found between the two variables. This preliminary investigation concludes that since the degree of importance placed on the career expectations of others is not related to one's level of CDMSE, this variable should not be a central focus in career counseling.

The examination of the relationship between CDMSE and coping style yielded interesting results. Those with high CDMSE expectations were found to rely on Efficacy and Support-Seeking coping strategies. Intuitively, it seems natural that those with a high level of confidence with regard to their ability to master career decision-making tasks would also have a high level of confidence with regard to their ability to cope with the

anxiety involved in the career decision-making process. Initially, it was surprising that the Support-Seeking coping style had a significant positive relationship with CDMSE. After further exploration it was concluded that, in a career decision-making context, seeking support can be interpreted as a form of gathering information about one's self and the careers one is interested in. Two of the five items (numbers 2 and 12) used to evaluate the Support-Seeking style on the Coping Scale led to this conclusion. These items read as follows: (2) Talk with people, other than my parents, who are involved; and (12) Seek advice from people who can help me think of ways to do what I am supposed to do. These two items could tap into the information gathering activities indicated on the CDMSE scale such as talking to a faculty member in a department one is considering for a major; asking a faculty member about graduate schools and job opportunities in one's major; using a university placement office's services; and talking with a person already employed in the field you are interested in. Originally, it was thought that relying on the Support-Seeking coping style would indicate high susceptibility to external influences. However, in light of these results, this perspective has changed. In a career decision-making context, Support-Seeking would indicate low susceptibility to external influences when it is viewed as a self-reliant information gathering method.

The implications for counseling generated with regard to coping style and CDMSE are very promising. The relationship between the Efficacy and Support-Seeking career decision-making coping styles and

CDMSE suggest that the three variables involved similar behavior domains. This provides a situation where there is a high degree of generality for personal efficacy expectations. Clients experiencing career decision-making difficulties should be encouraged to increase the degree of their efficacy expectations for career decision-making via the four major sources of efficacy information: personal performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal. Because of the similarity between these three behavior domains, the benefits achieved from increasing these clients' efficacy expectations for any of these career decision-making behaviors should generalize to each of the other behavior domains. By developing high self-efficacy expectations across all of these behavior domains, the desired effect, to help clients make self-reliant career decisions, will be achieved.

The results of the examination of the relationship between decision-making style and CDMSE were as expected. Those with high CDMSE expectations were found to rely on Rational decision-making strategies while those with low CDMSE beliefs used Dependent decision-making strategies. These relationships are clearly appropriate since each of the items on the CDMSE scale involves the systematic appraisal processes indicative of the Rational decision-making style. These processes include gathering and weighing information about one's self and one's career decision-making situation in a realistic and objective manner as well as anticipating the consequences of previous and current decisions. A person relying on the Dependent decision-making style

would be engaging in few, if any, of the CDMSE scale tasks. This person has already allocated responsibility for making his/her career decisions to someone else. Thus, a Dependent decider believes he/she has no need to master career decision-making tasks.

The career counseling implications for decision-making style are very straight forward. A client experiencing career decision-making difficulties that is assessed as relying on Dependent decision-making strategies should, first, be encouraged to take responsibility for making his/her career decisions and, second, be put in situations where he/she can experience success with regard to the CDMSE scale's tasks. This will increase his/her CDMSE via the personal performance accomplishment source of efficacy information. Gaining efficacy information through the other three sources should be encouraged down the road, but the personal performance accomplishment source should give the best initial results.

Susceptibility to External Influences

The results of the factor analysis which was conducted to investigate the possibility of the existence of one Susceptibility to External Influences Factor are encouraging, but they are not as clear cut as they were expected to be. The loadings on the three factors that emerged in this investigation closely satisfy each of the following expectations: (1) there is only one SEI factor; (2) each of the assessment instruments is actually measuring the SEI construct in a different context (coping style, decision-making style, locus of control, and IOEC); and (3) each of the

variables is assessing a particular aspect or level (high, medium, or low) of SEI. The only variables that did not load according to these expectations were the Rational decision-making style and the IOEC. It is suspected that a replication of this investigation using a larger sample may provide results in which the Rational decision-making style and the IOEC load more appropriately (Factor 1 and Factor 3 respectively).

The examination of the relationship between the three SEI factors and CDMSE yielded promising results with regard to implications for career counseling. Each factor's relationship with CDMSE corresponded with the relationship maintained by the majority of the variables that make it up. Low SEI was related to high CDMSE and high SEI was related to low CDMSE. A medium level of SEI was not related significantly to CDMSE. It appears that rather than do a separate assessment of each variable, it would be more beneficial for counselors to do one assessment of SEI with the understanding that it will provide them with information describing the client's career decision-making behavior tendencies in the areas of decision-making style, coping style, locus of control, and IOEC.

Gender

Throughout the reviewed literature either mixed or preliminary results were reported in studies examining gender differences in variables related to the career decision-making process. The present study found no significant gender differences for any of the variables it examined: decision-making style, coping style, locus of control, IOEC, and CDMSE.

This study confirms Taylor and Betz's (1983) results that revealed no gender differences with regard to the CDMSE scale. It also confirms the results of Lunneborg (1978) and Harren et al. (1978) that presented no gender differences in career decision-making style. This study disconfirms, however, the results of Phillips et al. (1978), O'Hare and Beutell (1987), and Taylor (1982) who found gender differences in career decision-making style, coping style, and locus of control respectively. It should be noted that the IOEC variable is unique to this investigation so all the data collected on it is preliminary.

It appears that gender differences in the career-related, SEI variables investigated in this study are at best non-existent, and at worst still questionable. Keeping these results in mind, it seems ludicrous to assign interventions to those experiencing career decision-making difficulties as they have been in the past -- according to the client's gender. One of the main objectives of this study was to disconfirm the hypothesis that differences in SEI can be accounted for by differences in gender. Since the present study did not find significant gender differences for any of the SEI variables it examined, it was unable to perform this part of its data analysis.

Limitations

One of the main limitations of this work, and many other career self-efficacy studies, is the correlational nature of many of the investigations. This study provides predictive information regarding career-related behaviors via a correlational paradigm, but such an

approach does not allow causal inferences to be drawn between the variables of this investigation. Another limitation of the current work is the exclusive utilization of college students as its source of subjects. Results of this investigation may not be generalizable to other populations. One final limitation is this study's small sample size. A replication using a significantly larger sample is recommended.

Future Research

The ideas for future research generated by this investigation are abundant. A critical next step to this line of research is to investigate the relationship between the correlational behavioral outcomes generated by this study and the actual behavioral outcomes achieved in career counseling situations. Of specific importance is the need to verify the hypothesized link between increased efficacy expectations and enhanced career decidedness.

Further, this investigation considered only a handful of career-related variables. It would be beneficial not only to replicate the present study but to consider other career-related variables with regard to their relationship to CDMSE, SEI, and career decidedness. Future researchers are also encouraged to study these areas of career counseling using populations other than college students to obtain their samples. In regards to gender-differences, one's gender (sex) can be different from one's sex-role orientation. It would be wise to consider sex-role orientation differences as well as gender differences in future career development studies. The data generated by this study with regard to the

importance of others' expectations for one's career decisions are preliminary. Scrutinization of this construct is necessary as is the development of a reliable and valid method of assessing its influence on a person's career development. The results of the present study's factor analysis indicated that there is one SEI factor and that each of the investigated variables was tapping into it, each under the guise of a different context. Finally, the development of a specific SEI assessment whose results are generalizable to many aspects of career development (i.e. coping style, decision-making style, and locus of control) would be helpful to career counselors as it would eliminate the tendency to assess a client's SEI from multiple aspects.

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APPENDIX A

Study Summary

The purpose of the study you participated in today was to test the hypothesis that sex differences that have been found in how people cope with career decision-making difficulties are accounted for primarily by differences in decision-making self-confidence (self-efficacy). To explain, a number of studies have shown that women more than men tend to seek out and rely on others' opinions about appropriate careers for them when they are unsure about what careers to pursue. On the other hand, men seem to be more self-reliant in solving career decision-making dilemmas. They tend more often to follow a rational as opposed to dependent course of action by seeking out and weighing information on their own rather than pursuing courses of action suggested to them by others.

It has also been suggested that women's greater susceptibility to external sources of career influence is one reason why many women fail to pursue careers in male dominated fields (e.g., science and math-related fields) even though they have the abilities and skills to be successful in these fields.

However, it is our hypothesis that it is not one's sex that determines how one will cope with career choice difficulties, but one's confidence in his or her ability to make effective career decisions. And since there also appear to be sex differences in career decision-making self-confidence, sex differences in coping strategies, we think, can be accounted for and explained by differences in decision-making self-efficacy. The main

implications of our hypothesis, if supported, is that it is one's self-confidence in his/her decision-making abilities that will determine whether a self-reliant or more dependent strategy will be employed in making career decisions and that intervention efforts for both men and women should be directed at increasing self-efficacy beliefs if we want people (men and especially women) to be less dependent on others as sources of career information.

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APPENDIX B

Background Information Form

Thank you for agreeing to participate in this study. Please read the instructions for each set of questions and then respond to each item. If you have any questions, please ask the individual administering this study. Thank you again for your cooperation.

****

Age _____ Sex _____ Year in College _____

Ethnicity: African American _____ Asian American _____

Caucasian _____ Native American _____ Other _____

College GPA _____ High School GPA _____

Have you chosen a major? _____ Yes _____ No

If YES, what major have you chosen? _____

If NO, please indicate the major(s) you are currently seriously considering:

_____

_____

Have you chosen an occupation? _____Yes _____No

If YES, what occupation have you chosen? _____

If NO, please indicate the occupation(s) you are currently seriously considering:_____

_____

Why are you considering the occupation(s) listed above--in other words, what led you to choose these occupational fields? Give one to three reasons if possible.

1) _____

2) _____

3) _____

Other _____

APPENDIX C

Importance of Others' Expectations for Career Questionnaire

****

Please rate how important each of the following is to your choice of careers.

1) Your mother's expectations.
2) Your father's expectations.
3) Your most important female friend's expectations.
4) Your most important male friend's expectations.
5) Society's expectations of what career is appropriate for your sex.

Ratings were done on a 7-point scale ranging from Not Important At All (1) to Extremely Important (7).

APPENDIX D

Assessment of Career Decision-Making Style

To complete this inventory, think about how you generally make decisions and then answer each question below in terms of whether it is true of how you generally make decisions. If the statement is true or mostly true for you, circle T. If it is false or mostly false for you, circle F. Answer all statements and circle only one answer for each statement.

T F 1. I am very systematic when I go about making an important decision.

T F 2. I like to have someone steer me in the right direction when I am faced with an important decision.

T F 3. I make decisions pretty creatively, following my own inner instincts.

T F 4. I usually make my decisions based on how things are for me right now rather than how they will be in the future.

T F 5. I rarely make an important decision without gathering all the information I can.

T F 6. I often make a decision which is right for me without knowing why I made the decision.

T F 7. When I make a decision I consider its consequences in relation to decisions I will have to make later on.

T F 8. When I make a decision it is important to me what my friends think about it.

T F 9. I really have a hard time making important decisions without help.

T F 10. Even on important decisions I make up my mind pretty quickly.

T F 11. When I make a decision I just trust my inner feelings and reactions.

T F 12. I often make decisions based on what other people think, rather than on what I'd really like to do.

T F 13. When I need to make a decision I take my time and think it through carefully.

T T 14. I often decide on something without checking it out and getting the facts.

T F 15. I rarely make a decision without talking to a close friend first.

T F 16. I put off making many decisions because thinking about them makes me feel uneasy.

T F 17. When an important decision is coming up, I look far enough ahead so I'll have enough time to plan and think it through before I have to act.

T F 18. I double-check my information sources to be sure I have the right facts before deciding.

T F 19. I don't really think about the decision; it's in the back of my mind for awhile, then suddenly it will hit me and I know what I will do.

T F 20. Before I do anything important, I have a carefully worked out plan.

T F 21. I seem to need a lot of encouragement and support from others when I make a decision.

T F 22. In coming to a decision about something, I usually use my imagination or fantasies to see how I would feel if I did it.

T F 23. There's not much sense in making a decision that is going to make me unpopular.

T F 24. I don't have to have a rational reason for most decisions I make.

T F 25. I don't make decisions hastily because I want to be sure I make the right decision.

T F 26. A decision is right for me if it is emotionally satisfying.

T F 27. I don't have much confidence in my ability to make good decisions so I rely on others' opinions.

T F 28. Often I see each of my decisions as stages in my progress toward a definite goal.

T F 29. I usually don't have a lot of confidence in my decisions unless my friends give me support for them.

T F 30. I like to learn as much as I can about the possible consequences of a decision before I make it.

APPENDIX E

I-E Scale

INSTRUCTIONS:

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternative letters a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you are concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true.

Please circle your response for each item.

Please answer these items carefully but do not spend too much time on any one item.

Be sure to find an answer for every choice.

In some instances you may discover that you believe both statements or neither one.

In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.

INVENTORY:

1. a. Children get into trouble because their parents punish them too much.

   b. The trouble with most children nowadays is that their parents are too easy on them.

2. a. Many of the unhappy things in people's lives are partly due to bad luck.

   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.

   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world.

   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. a. The idea that teachers are unfair to students is nonsense.

   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.

   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

7. a. No matter how hard you try some people just don't like you.

   b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality.

   b. It is one's experiences in life which determine what they're like.

9. a. I have often found that what is going to happen will happen.

   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.

    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becoming a success is really a matter of hard work, luck has little or nothing to do with it.

    b. Getting a good job depends mainly on being in the right place at the right time.

12. a. The average citizen can have an influence in government decisions.

    b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. a. When I make plans, I am almost certain that I can make them work.

    b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyway.

14. a. There are certain people who are just no good.

    b. There is some good in everyone.

15. a. In my case getting what I want has little or nothing to do with luck.

    b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.

    b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.

    b. By taking an active part in political and social affairs the people can control world events.

18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.

    b. There really is no such thing as "luck."

19. a. One should always be willing to admit mistakes.

    b. It is usually best to cover up one's mistakes.

20. a. It is hard to know whether a person really likes you.

    b. How many friends you have depends on how nice a person you are.

21. a. In the long run the bad things that happen to us are balanced by the good ones.

    b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.

    b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.

    b. There is a direct connection between how hard I study and the grades I get.

24. a. A good leader expects people to decide for themselves what they should do.

    b. A leader good makes it clear to everyone what their jobs are.

25. a. Many times I feel that I have little influence over the things that happen to me.

    b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.

    b. There's not much use in trying too hard to please people, if they like you, they like you.

27. a. There is too much emphasis on athletics in high school.

    b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing.

    b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.

    b. In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX F

Coping Scale

At some time a student must make a decision regarding a particular career choice. Choosing a career may include selection of an occupation and/or choice of a professional school. A career is not simply a work role, but a role that defines who you will be. As such, involvement in the career decision making process is a stressful situation. That is, one that causes tension and pressure, whether you are committed to a career or still uncertain about your career. Read each statement below and indicate how you personally react to your career decision concerns.

1. Get together with my parents to discuss the situation.

2. Talk with people, other than my parents, who are involved.

3. Delegate the decision to others.

4. Decide what I think should be done and do it myself.

5. Request help from people who I think have the power to do something for me.

6. Work on changing those responsible for causing the situation.

7. Act as I usually do and wait for the situation to change.

8. Try to be super-organized so I can keep on top of things.

9. Pay extra attention to planning and scheduling my priorities.

10. Try to plan more carefully and intelligently.

11. Give my best effort to doing what is expected of me.

12. Seek advice from people who can help me think of ways to do what I'm supposed to do.

13. Throw myself into the decision and work longer and harder.

14. Try to work harder at making the best decision.

15. Try to steer clear of making this decision.

16. Avoid making this decision if I can.

17. Do my best to get out of the decision gracefully.

18. Separate myself as much as possible from the people who created this situation.

19. Tell myself that time takes care of decisions like this one.

20. Remind myself that this decision isn't everything.

21. Try not to be concerned or upset about it.

22. Accept the situation because there is nothing that I can do to change it.

23. Try to think of myself as a winner, as someone who always comes through.

24. Remind myself that other people have been in this situation and that I can probably do as well as they did.

25. Analyze the negative consequences so that I'm prepared for the worst.

26. Think of ways to use this situation to show what I can do.

27. Tell myself that I can probably work things out to my advantage.

28. Think about challenges I can find in this situation.

29. Think more about the positive aspects of my decision.

30. Tell myself that the decision is not important.

31. Take naps and get extra sleep.

32. Drink a moderate amount of liquor, beer, or wine (2 drinks).
33. Drink more than a moderate amount of liquor, beer, or wine.
34. Jog, bicycle, dance, or get some other type of physical exercise.
35. Take tranquilizers, sleeping pills, or other drugs to feel better.
36. Eat more snacks or heavier meals.
37. Complain to other people about the situation.
38. Spend extra money; buy something to calm my nerves.
39. Take a day off from school/work.
40. Go on a trip or take a brief vacation from school/work.
41. Daydream.
42. Seek professional help or counselling.
43. Pray or go to church.
44. Use biofeedback to pay attention to my physical reactions.
45. Meditate or use structured relaxation exercises.
46. Seek the company of friends.
47. Spend time with family or loved ones.
48. Watch television.
49. Attend sporting or cultural events.
50. Spend time on a hobby that I enjoy.
51. Get my hair fixed, a massage, or sauna.
52. Take out my frustration on my family or friends.

53. Smoke cigarettes, cigars, or a pipe.

Responses were made on a 5-point scale ranging from Hardly Ever Do This (1) to Almost Always Do This (5).

APPENDIX G

Sex-Role Orientation Inventory

DIRECTIONS

On the opposite side of this sheet, you will find a number of personality characteristics. We would like you to use those characteristics to describe yourself, that is, we would like you to indicate, on a scale from 1 to 7, how true of you each of these characteristics is. Please do not leave any characteristic unmarked.

Example: sly

Write a 1 if it is never or almost never true that you are sly.
Write a 2 if it is usually not true that you are sly.
Write a 3 if it is sometimes but infrequently true that you are sly.
Write a 4 if it is occasionally true that you are sly.
Write a 5 if it is often true that you are sly.
Write a 6 if it is usually true that you are sly.
Write a 7 if it is always or almost always true that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly," never or almost never true that you are "malicious," always or almost always true that you are "irresponsible," and often true that you are "carefree," then you would rate these characteristics as follows:

Sly	3	Irresponsible	7
Malicious	1	Carefree	5

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Personality Characteristics

Defend my own beliefs	Adaptable	Flatterable
Affectionate	Dominant	Theatrical
Conscientious	Tender	Self-sufficient
Independent	Conceited	Loyal
Sympathetic	Willing to take a stand	Happy
Moody	Love children	Individualistic
Assertive	Tactful	Soft-spoken
Sensitive to needs of others	Aggressive	Unpredictable
Reliable	Gentle	Masculine
Strong personality	Conventional	Gullible
Understanding	Self-reliant	Solemn
Jealous	Yielding	Competitive
Forceful	Helpful	Childlike
Compassionate	Athletic	Likeable
Do not use harsh language	Cheerful	Ambitious
Have leadership abilities	Unsystematic	Truthful
Eager to soothe hurt feelings	Analytical	Sincere
Secretive	Shy	Act as a leader
Willing to take risks	Inefficient	Feminine
Warm	Make decisions easily	Friendly

APPENDIX H

Career Decision-Making Self-Efficacy Scale

CAREER QUESTIONNAIRE

INSTRUCTIONS: For each statement below, please read carefully and indicate how much confidence you have that you could accomplish each of these tasks by marking your answer according to the following 10-point continuum.

No Confidence at all		Very Little Confidence		Some Confidence		Much Confidence			Complete Confidence
0	1	2	3	4	5	6	7	8	9

Example: Summarize the skills you have developed in the jobs you have held.

If your response on a 10-point continuum was 5, "Some Confidence," you would circle the number 5 in the right hand column as follows:

0 1 2 3 4 5 6 7 8 9

List of Career Decision-Making Task Statements

1. List several majors that you are interested in.
2. Find information in the library about occupations you are interested in.
3. Select one major from a list of potential majors you are considering.
4. Make a plan of your goals for the next five years.
5. Determine the steps to take if you are having academic trouble with an aspect of your chosen major.
6. Accurately assess your abilities.

7. Find information about companies who employ people with college majors in English.

8. Select one occupation from a list of potential occupations you are considering.

9. Determine the steps you need to take to successfully complete your chosen major.

10. Persistently work at your major or career goal even when you get frustrated.

11. List several occupations that you are interested in.

12. Find information about educational programs in engineering.

13. Choose a career that will fit your preferred lifestyle.

14. Prepare a good resume.

15. Change majors if you do not like your first choice.

16. Determine what your ideal job would be.

17. Talk to a faculty member in a department you are considering for a major.

18. Make a career decision and then not worry about whether it was right or wrong.

19. Get letters of recommendation from your professors.

20. Change occupations if you are not satisfied with the one you enter.

21. Decide what you value most in an occupation.

22. Ask a faculty member about graduate schools and job opportunities in your major.

23. Choose a major or career that your parents do not approve of.

24. Get involved in work experience relevant to your future goals.

25. Resist attempts of parents or friends to push you into a career or major you believe is beyond your abilities.

26. Figure out whether you have the ability to successfully take math courses.

27. Describe the job duties of the career/occupation you would like to pursue.

28. Choose a career in which workers are the opposite sex.

29. Find and use the Placement Office on campus.

30. Move to another city to get the kind of job you really would like.

31. Determine the academic subject you have the most ability in.

32. Find out the employment trends for an occupation in the 1990's.

33. Choose a major or career that will fit you interests.

34. Decide whether or not you will need to attend graduate or professional school to achieve your career goals.

35. Apply again to graduate schools after being rejected the first time.

36. Determine whether you would rather work primarily with people or information.

37. Find out about the average yearly earnings of people in an occupation.

38. Choose a major or career that will suit your abilities.

39. Plan course work outside of your major that will help you in your future career.

40. Identify some reasonable major or career alternatives if you are unable to get your first choice.

41. Figure out what you are and are not ready to sacrifice to achieve your career goals.

42. Talk with a person already employed in the field you are interested in.

43. Choose the best major for you even if it took longer to finish your college degree.

44. Identify employers, firms, and institutions relevant to your career possibilities.

45. Go back to school to get a graduate degree after being out of school 5-10 years.

APPENDIX I

Traditionality of Significant Others Questionnaire

How traditional are each of the following people's beliefs about the roles women and men should hold in our society?

1) Your mother's beliefs.

2) Your father's beliefs.

3) Your most important female friend's beliefs.

4) Your most important male friend's beliefs.

5) Your beliefs.

Ratings were done on a 7-point scale ranging from Not Traditional at All (1) to Extremely Traditional (7).

APPENDIX J

TABLE 1

Analysis of Variance Results - Gender by each Career-Related Variable.

Source	DF	Mean Square	F	Sig. of F
IOEC				
Main Effects	1	21.034	.470	.495
Residual	66	44.756		
Total	67	44.402		
ACDM Rational				
Main Effects	1	.349	.043	.836
Residual	63	8.113		
Total	64	7.991		
ACDM Intuitive				
Main Effects	1	9.758	1.940	.169
Residual	63	5.029		
Total	64	5.103		
ACDM Dependent				
Main Effects	1	10.758	1.733	.193
Residual	64	6.209		
Total	65	6.279		

I-E Scale				
Main Effects	1	.002	.000	.988
Residual	66	9.724		
Total	67	9.579		
Coping Efficacy				
Main Effects	1	10.452	.248	.620
Residual	64	42.188		
Total	65	41.700		
Coping Reactive				
Main Effects	1	2.178	.151	.699
Residual	66	14.406		
Total	67	14.224		
Coping Avoidant				
Main Effects	1	190.661	3.653	.061
Residual	63	52.190		
Total	64	54.353		
Coping Support-Seeking				
Main Effects	1	1.783	.126	.724
Residual	66	14.152		
Total	67	13.967		
CDMSE				
Main Effects	1	4763.984	1.656	.203
Residual	65	2877.469		
Total	66	2906.052		

APPROVAL SHEET

The thesis submitted by Susan C. Meyle has been read and approved by the following committee:

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The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

Date

April 19, 1993

Director's Signature

VITA

The author, Susan Converse Meyle, was born in Pittsburgh, Pennsylvania.

In August, 1985, Ms. Meyle entered Bradley University, receiving the degree of Bachelor of Science in psychology Cum Laude in May, 1988. While attending Bradley University, she was a member of the Dean's List and the Mortarboard National Honor Society.

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