

Career Decision-Making Difficulties of First-Year Students

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Abstract

First-year university students often experience career indecision and related career decision-making difficulties. Gati, Krausz, and Osipow (1996) developed a taxonomy for understanding the various difficulties contributing to career indecision. The focus of the current study was to examine their taxonomy with a Canadian sample of university students in relation to career decision-making self-efficacy, sex-role identification, and stage of identity development. Our results indicated a significant negative correlation between career decision-making difficulties and self-efficacy, which discriminated among degree of career indecision and whether or not students had changed their career plans since attending university. Also, there were some significant sex-role orientation and stage of identity differences for some of these variables. Implications for career counsellors are discussed.

Career Decision-Making Difficulties of First-Year University Students

First-year university students are faced with many life challenges, not least of which is the decision about which career path to follow. Unfortunately, many first-year students often experience career indecision, which is conceptualized as "a construct referring to problems individuals may have in making their career decision" (Gati, Krausz, & Osipow, 1996, p. 510). While few if any students are "ideal career planners" (primarily due to the complexity of career planning), some appear to have less career indecision and seemingly find it easier to decide on a career path than others do. Those who struggle with career indecision are likely unable to resolve one or more career decision-making difficulties.

Gati, Krausz, and Osipow (1996) developed a taxonomy for understanding the various difficulties contributing to career indecision. In their taxonomy, a basic distinction was made between career decision-making difficulties occurring prior to the beginning of the career decision-making process and those occurring during the career decision-making process itself. They further subdivided the latter factor, resulting in three subfactors overall: lack of readiness, lack of information, and inconsistent information.

The lack of readiness subfactor was used to account for those career decision-making difficulties that precede engagement in the career decision-making process. Gati, Krausz, and Osipow (1996) identified three theoretical categories of career decision-making difficulties that they believed contributed to a lack of readiness to begin the career decision-making process. These three categories were: (1) a lack of motivation on the part of the individual to begin career decision-making, (2) a general indecisiveness that permeates all types of decision-making for the individual, and (3) various beliefs in dysfunctional career decision-making myths (e.g., career decisions are best made by experts).

The lack of information and inconsistent information subfactors were used to account for those career decision-making difficulties that occur during the process of career decision-making. The lack of information subfactor was divided into four additional categories of career decision-making difficulties: (4) lack of information about the career decision-making process (i.e., not knowing how to make a career decision); (5) lack of information about the self (e.g., not having knowledge about capabilities, personality traits, or interests); (6) lack of information about

occupations (e.g., not understanding what work is involved in specific occupations and not knowing about the wide range of occupational options available); and (7) lack of information about ways of obtaining career information (i.e., confusion about how to begin researching vocational options).

The inconsistent information subfactor was divided into three categories of career decision-making difficulties: (8) inconsistent information due to unreliable information (i.e., difficulties related to unreliable or fuzzy information); (9) inconsistent information due to internal conflicts (e.g., difficulties related to the evolving personal identity of the individual); and (10) inconsistent information due to external conflicts (e.g., conflicts involving significant others).

Gati, Krausz, and Osipow (1996) developed a questionnaire (the Career Decision Difficulties Questionnaire) to empirically examine their taxonomy of career decision-making difficulties. They administered this questionnaire to a sample of 259 young Israeli adults who were at the beginning of their career decision-making process and to an American sample of 304 university students. Their results indicated that the pattern of relationship among the 10 decision-making difficulty categories was generally similar to the hypothesized pattern in both samples and that there were no significant differences between the two samples (despite age and cultural differences). They believed their taxonomy of career decision-making difficulties needs further elaboration, especially the 10 decision-making difficulty categories, before it can be claimed that the construct of career indecision is well understood (Gati, Krausz, & Osipow, 1996).

For the current study, we were interested in examining the relationship

of their model of career decision-making difficulties with career decision-making self-efficacy, sex-role identification, and stage of identity development.

We included the variable of career decision-making self-efficacy because there is substantial research to show that it is a major predictor of career indecision (e.g., Betz & Vuyten, 1997). The concept of self-efficacy originated from Bandura's (1986) contention that people who believe in their ability to successfully complete the tasks required to achieve an outcome are more likely to engage in and persist at those tasks. This idea has been extended to career development and has become an important variable in understanding the career decision-making process (see reviews by Hackett, 1995; Hackett & Betz, 1992; 1995). For example, Blustein (1989) found that higher self-efficacy about career decision-making was positively related to engagement in career exploratory behaviours. Also, students' self-efficacy beliefs about their capabilities relate to the range and nature of career options considered and that levels of self-efficacy predict "academic performance and persistence as well as career decision-making intentions and behaviors" (Betz & Vuyten, 1997, p. 180). Considering these findings, we predicted a significant negative relationship between career decision-making difficulties and self-efficacy.

We included the variable of sex-role identification to examine its relationships with career decision-making difficulties. Several recent studies have examined the relationship among sex-role orientation and choice of major and occupation with conflicting results. Dawson-Threat and Huba (1996) reported that males in male-dominated and female-dominated majors were comparable in masculinity. In contrast, Jome and Tokar (1998) found that career-traditional men endorsed significantly higher stereotypic male attitudes (e.g., "toughness", anti-femininity) than men in non-traditional careers, though there were no differences in conflicts between work and family relations. With a mediated model in a second study, these authors reported that vocational interests mediated the relation-

ship between masculinity and traditionality of career choice (Tokar & Jome, 1998), suggesting the importance of including multiple variables when examining the relationship between sex-role identification and career choice.

Earlier research appeared to more strongly support the contention that sex-role orientation was related to occupational choice. For example, women who were working in more traditional male occupations and who had not attained a college education were found to be more outgoing, active, ambitious, direct and task-oriented than those working in more traditional female occupations (Mazen & Lemkau, 1990). Women in more traditional male occupations have also been found to score higher on the masculinity scale of the Bem Sex Role Inventory (Bem, 1981) than did women in more traditional female occupations. Finally, women in male-dominated majors viewed themselves as less feminine than women in female-dominated majors (Dawson-Threat & Huba, 1996).

Although these studies have identified relationships among sex-role orientations and choice of majors and careers, they have not examined whether there is a significant relationship between sex-role orientation and the degree of career decision-making difficulties or self-efficacy and we wanted to examine those relationships in this study.

Another area that has received attention for its relationship to the career decision-making process is stages of identity development. Several developmental theorists have identified the process of developing one's vocational identity as an important part of becoming an adult. For example, Erikson (1968) conceptualized vocational identity as an important aspect of overall development. Marcia (1966, 1980) operationalized Erikson's conceptualizations and identified four main stages of identity development, which are related to the degree of commitment to one's beliefs and values on a variety of issues. These four stages are conceptualized in a hierarchy, starting with the Diffusion status, when the individual has not experienced a devel-

opmental crisis yet and therefore would not have made a commitment to vocational choice. The second stage is Foreclosure, which represents an ongoing identification with childhood values and although they may have made a vocational commitment, it likely was without sufficient self-exploration. The third stage is Moratorium, in which the individual is beginning to question her/his values and is exploring options but has not yet made a commitment. The final stage is Achievement, which represents a clear commitment to a vocational area.

For first-year university students, it is unlikely that many will be at the Achievement stage and be able to make a career decision that is well-researched and congruent with their interests, personality, skills, and values. There have not been many studies that have researched career decision-making and stage of identity development. One study that researched grade seven to 12 students' identity status and degree of career indecision found that those in the Achievement category has significantly less career indecision than those in the other three identity categories (Vondracek, Schulenberg, Skorikov, Gillespie, & Wahlheim, 1995). We wanted to investigate whether this pattern of results would be replicated with a first-year university sample.

In summary, our hypotheses were that career decision-making difficulties would be negatively related to career decision-making self-efficacy, that participants who identified with a masculine or androgynous sex-role orientation would have fewer difficulties and higher self-efficacy than those with feminine or undifferentiated sex-role orientations, and that those participants in the Achievement identity category would have fewer career decision-making difficulties and higher self-efficacy than those in the other three identity categories.

Method

Participants

We received responses from 189 students initially and 155 of these students were in their first year of university. Data from six of the 155 first-year students were removed due to low

response rate, missing data, and multivariate outliers. Therefore, we had 149 first-year participants' responses included in the analyses.

Sixty-two percent of the respondents were women and 38% were men. The question about the participants' current age was presented in categorical format. For the 149 participants, their age range was "under 18" to "over 25" years, with the majority (48.3%) indicating that they were 18 years of age; 80% were 19 years of age and younger. Seventy-three percent indicated their racial background to be Caucasian, 8.7% indicated Asian, and the remaining participants indicated other responses.

Instrumentation

Demographic, Career Decision-Making Strategies, and Qualitative Questionnaire. On this questionnaire, participants indicated their sex, age, racial background, year at university, socioeconomic status, current career decision-making status using very undecided, slightly undecided, or not at all undecided (which is a question from the CDDQ, described below), and the strategies they have used to make career decisions to date by endorsing items on a checklist.

Career Decision Difficulties Questionnaire (CDDQ; Gati, Krausz & Osipow, 1996). The CDDQ is a 44-item questionnaire developed to assess career decision-making difficulties based on the taxonomy proposed by Gati, Krausz, and Osipow (1996). The internal consistency reliability coefficients ranged from .70 to .93 for the three scales and it was .95 for the full questionnaire. For our study, the alpha internal consistency reliability coefficients were .80, .95, .91, and .96 for the Lack of Readiness, Lack of Information, and Inconsistent Information subscales, and the full scale, respectively. The CDDQ has been found to have a good convergent validity with the Career Decision Scale and good discriminant validity (Lancaster, Rudolph, Perkins & Patten, 1999; Osipow, 1999).

Career Decision-Making Self-Efficacy - Short Form (CDMSE-SF; Betz, Klein, & Taylor, 1996). The CDMSE-SF is 25-item questionnaire

that uses a 5-point scale. The full test score can range from 25 to 125, with higher scores indicating more self-efficacy. Reliability of the short form as measured by coefficient alpha is .94 (Betz, Klein, & Taylor, 1996), which compares well to the coefficient alpha (.97) of the original Career Decision-Making Self-Efficacy Scale (CDMSE-SF). For our study, the alpha internal consistency reliability coefficient was .92. The CDMSE-SF has been found to have good concurrent validity with the Career Decision Scale and My Vocational Situation (Betz, Klein, & Taylor, 1996).

Bem Sex Role Inventory (BSRI; Bem, 1981). The BSRI is a 60-item questionnaire that uses a 7-point scale. Twenty items are considered to be stereotypically feminine, 20 stereotypically masculine and 20 are used as filler items (e.g., reliable). Masculine and feminine scores are computed by averaging the raw score of the 20 items designated for each scale. A median split method is used to classify participants into one of four groups: masculine identified, feminine identified, androgynous, and undifferentiated. Internal consistency for the masculinity and femininity scales are reported to be between .75 and .87 (Bem, 1981). For our study, the alpha internal consistency reliability coefficients were .85 and .82 for the masculinity and femininity scales, respectively. The BSI has adequate validity (Bem, 1981).

Extended Objective Measure of Ego Identity Status (EOM-EIS; Bennion & Adams, 1986). The EOM-EIS is a 64-item questionnaire that measures the presence or absence of crisis and commitment in different domains of identity development. It is based upon the identity development interviews constructed by Marcia (1966, 1980) and participants' responses are scored to correspond with one of Marcia's four identity stages: diffusion, foreclosure, moratorium, and achievement. The EOM-EIS has been found to have good internal consistency and good discriminant, convergent, concurrent, and predictive validities (Bennion & Adams, 1986).

Procedure

Students who were enrolled in the

Introduction to Psychology course at a large, urban university in western Canada were asked to voluntarily and anonymously complete the package of questionnaires as an option for meeting requirements for experimental credits. The participants completed a consent form that reminded them that they were free to withdraw from this study at any time without penalty. Following completion of the questionnaires, the participants were provided with a feedback sheet that indicated university career counselling services that they could access.

Results

Two of the main questionnaires that we used required classification of participants' scores, which is outlined in the questionnaires' manuals. For the BSRI, which measured sex-role orientation, 24.8% were "masculine", 24.8% were "feminine", 18.1% were "androgynous", and 28.2% were "undifferentiated", while 4.0% were not classified. For the EOM-EIS, 21.5% were "diffusion", 16.8% were "foreclosure", 38.3% were "moratorium", and 8.7% were "achievement", while 14.8% were not classified.

In response to a question regarding degree of career undecidedness from the CDDQ that is not included in the scoring of the subscales or total, 16.1% were very undecided, 48.3% were slightly undecided about their career choice, while the remainder indicated that they were "not at all" career undecided (one participant did not answer this item). Also, we asked a question regarding whether students had changed their career plans during their first year at university and 36.7% responded affirmatively (two participants did not answer this item).

The means for the CDDQ and the CDMSE-SF were 152.32 ($SD = 61.56$) and 91.24 ($SD = 14.59$) respectively and the correlation was -0.63 ; these scores were dependent variables in the analyses.

To determine whether there were significant differences by sex-role identification on the main variables, a MANOVA was performed with the four categories of sex-role identification as the independent variable and the CDDQ total and the CDMSE-SF total

as the dependent variables. The analysis was significant, $F(6, 278) = 3.95, p < 0.05$. Post-hoc analyses were performed to determine what specific differences contributed to the significant multivariate result. Bonferroni *t* tests revealed that the “masculine” and “androgynous” sex-role identifications had significantly higher CDMSE-SF scores than “feminine” and “undifferentiated” sex-role identifications.

To determine whether there were significant differences by stage of identity development on the main variables, a MANOVA was performed with the four categories of stage of identity development as the independent variable and the CDDQ total and the CDMSE-SF total as the dependent variables. The analysis was not significant, $F(15, 363) = 1.27, p = 0.22$.

To determine whether there were significant differences by stage of identity development and one subscale from the CDDQ, “lack of information about self”, an ANOVA was performed with stage of identity development as the independent variable and the total for the CDDQ subscale as the dependent variable. It was significant, $F(3, 123) = 3.16, p = 0.03$. Bonferroni post-hoc analyses indicated that participants in the first identity category, diffusion, had significantly higher scores on the “lack of information about self” subscale than those in the fourth identity category, achievement. However, this result needs to be interpreted cautiously due to the low internal consistency reliability value of the Diffusion category.

A discriminant function analysis was performed to determine whether scores on the CDDQ and the CDMSE-SF would predict group membership for the career undecidedness category (not at all, slightly, or very undecided) for the 148 participants who answered that question. The discriminant function analysis with the two main variables were predictors and the three categories of career undecidedness as the dependent variable was significant, $\chi^2(4) = 61.92, p < 0.01$. Because there were three groups of participants, *t* tests were performed to determine which group differences were significant. Those analyses indicated that participants who were “slightly” or “very” career undecided had significantly

higher scores on the CDDQ and significantly lower scores on the CDMSE-SF than those who were “not at all” career undecided. Also, those who were “very” career undecided had significantly higher CDDQ scores than those who were “slightly” career undecided.

A second discriminant function analysis was performed to determine whether scores on the CDDQ and the CDMSE-SF would predict whether participants had changed their career plans or not for the 147 participants who answered that question. The discriminant function analysis was significant, $\chi^2(2) = 22.08, p < 0.01$, indicating that those who had changed their career plans had higher CDDQ scores and lower CDMSE-SF scores than those who had not changed their career plans.

Discussion

The main focus of this study was to examine the relationship of Gati, Krausz, and Osipow’s (1996) taxonomy of career decision-making difficulties to career decision-making self-efficacy, sex-role orientation, and stage of identity development. In general, our findings provided support for our hypotheses that those with fewer career decision-making difficulties would have higher career decision-making self-efficacy and would indicate “masculine” or “androgynous” sex-role identification than those with more career decision-making difficulties. Our results provided partial support for our hypothesis that participants at a higher stage of identity development would indicate fewer career decision-making difficulties. Finally, we did two additional analyses and those results indicated that those who were more career-undecided and had changed their career plans had more career decision-making difficulties and lower self-efficacy scores.

The relationship between career decision-making self-efficacy and the taxonomy of career decision-making difficulties as developed by Gati, Krausz, and Osipow (1996) appears complex. Our finding that a significant negative relationship exists between career decision-making difficulties and career decision-making self-efficacy is neither surprising nor unpredicted as extensive research in the area of career decision-making self-efficacy has

resulted in similar findings (e.g., Hackett, 1995; Hackett & Betz, 1992; 1995). The fact that the CDDQ is also related to career decision-making self-efficacy appears to provide support for the construct validity of this instrument. Whether career decision-making difficulties preceded or resulted from low career decision-making self-efficacy is unclear. The finding that students who changed career plans within their first year of university study were more likely to be experiencing continued career decision-making difficulties and lower career decision-making self-efficacy compared to those who had not changed career plans does not clarify this issue. Clearly, the need to change career plans suggests some difficulty with initial career planning but whether or not students who changed career plans are destined to have continued career decision-making difficulties and lower career decision-making self-efficacy likely depends on the new career plan they have constructed and the process used. Students who have not changed career plans may yet need to do so and the impact of the need to change on their career decision-making self-efficacy would be interesting to examine.

It is important to acknowledge that changes in career plans, while sometimes stressful for the student, are neither unusual nor unexpected, especially if we consider career development theory. For example, in Super’s (1990) life-span theory, individuals in the exploratory stage of career development examine and consider a variety of occupations before selection of a specific occupational goal. Individuals in this stage also recycle in the early stages of career planning as initial career plans are revised to incorporate new information. Perhaps the challenge to career counsellors therefore is to promote the message that career plan changes are normal and should not be viewed as indicative of a greater underlying problem (e.g., decision-making difficulties). Students accepting this message may be more likely to maintain a positive level of career decision-making self-efficacy while students who do not receive nor believe this message may be more vulnerable to experiencing decreased career decision-

making self-efficacy.

Our finding that students with “masculine” or “androgynous” sex-role identifications had fewer career decision-making difficulties and higher levels of career decision-making self-efficacy than their “feminine” or “undifferentiated” peers was also expected and consistent with previous research. For example, Dawson-Threat and Huba (1996) found that “androgynous” sex-role types had a clearer sense of purpose than those with other sex-role types, which could be related to fewer career decision-making difficulties.

One reason for these findings may be related to the personality traits associated with the masculine sex-role.

Masculine sex-roles have been associated with assertiveness, competence, and decisiveness (Spence, 1993), and these factors could be related to higher career decision-making self-efficacy. In contrast, feminine sex-roles have been associated with dependence, worrying, and low general self-efficacy (Marsh & Myers, 1986; Ricciardelli & Williams, 1995), which may be related to lower career decision-making self-efficacy.

These results suggest that sex-role identification can be an important factor in the career decision-making process and that the career counselling process could benefit from considering a student’s sex-role identity. For example, when conducting career counselling with students with feminine sex-role identifications, counsellors may be well advised to examine the student’s self-confidence, decisiveness and assertiveness abilities because these personal attributes may need to be enhanced to allow the student to overcome their career decision-making difficulties. Enhancing these attributes could lead to increased career decision-making self-efficacy.

Our main analysis examining the relationship between stages of identity development, career decision-making difficulties, and career decision-making self-efficacy was not significant. One contributing factor to this non-significant result may have been the uneven distribution of students in the four identity status groups. Although there was not a significant difference by identity status and the CDDQ total, examination of the group means suggested a

trend towards those in the achievement category having lower CDDQ scores than those in the diffusion category.

This pattern is consistent with developmental theories, including Marcia’s theory of identity development, which predict that those who are further along in the process of identity development would experience fewer difficulties with making a career decision because their sense of self is more developed than those whose identity is at an earlier stage of development.

However, our secondary analysis with stages of identity and one subscale total from the CDDQ, lack of information about self, was significant.

Specifically, the results indicated that students in the achievement category had significantly lower CDDQ scores than those in the diffusion category.

The finding that identity development is an important factor in the career decision-making process is not surprising given that the first stage of career planning often focuses on identification of a student’s interests, values, skills, personality preferences, and life goals. Students with a more clearly defined identity would likely have an easier time discussing these personal factors. Assisting with the promotion of student identity development, which is a common component of the mission of university counselling services, could therefore assist in reducing the career decision-making difficulties of students.

One of the greatest challenges in working with students in their first year of university study is the likelihood that their identity will be at an early stage of development resulting in a greater tendency for these students to request “too much” career guidance from identified experts. Several identity development theorists (e.g., Belenky, Clinchy, Goldberger, & Tarule, 1997; Chickering & Reisser, 1993) suggest that individuals at an early stage of identity development are more likely than individuals at latter stages of identity development to not trust their own judgment in decision-making and instead to look to “experts” for answers. Certainly that has been the experience of career counsellors working in our center. It is not uncommon for first-year university students to ask

career counsellors and other career service professionals the following questions: “What career should I go in?”; “What courses should I take?”; “What is the best career to enter?” One suggestion for responding to these types of questions is to maintain the image of an “expert” (e.g., indicating that you have expertise in helping students career plan and use career planning resources) when first working with such students in order to facilitate development of a positive counselling relationship. A second suggestion is to employ a simple, straightforward approach to counselling in order to reduce the risk of creating disabling anxiety in the student. Please see Knefelkamp and Slepitzka (1976) for additional information on the integration of identity theory into career counselling practice.

One of the applications of our findings is the development of career counselling programming tailored more effectively to the career decision-making needs of first-year students. Specifically, we need to continue to develop specific activities and interventions that increase students’ career decision-making self-efficacy, which would be predicted to decrease their career decision-making difficulties. We also need to continue to develop career services targeting each of the career decision-making difficulties as suggested by Gati, Krausz, and Osipow (1996). For example, at our counselling service, we have incorporated some of these ideas into a Career Exploration Workshop, which is the starting point of accessing career services at our counselling service. The Career Exploration Workshop actively involves students in discussions and activities about career myths and beliefs, career planning models, identity development, occupation identification and research, and conflict resolution. Counsellors assist students throughout this process by normalizing the challenges of career planning and by providing supportive feedback. Attendance and participation in the Career Exploration Workshop has been found to significantly increase students’ levels of career decision-making self-efficacy (Degen & Ness, 2001).

When considering the implications

of these findings, the limitations of this study need to be considered. One main limitation is the use of self-report methodology without any external corroboration. However, as indicated, the focus of the study was to understand more about these participants' career decision-making difficulties and their perception of the level of their self-efficacy. Another limitation is the correlational nature of the strong negative relationship between career decision-making difficulties and career decision-making self-efficacy. Future research should explore whether or not additional mediating or moderators variables are impacting this relationship. Finally, a third limitation of this study is that we only included first-year university students and therefore these participants were likely in the earlier stages of their career planning process. Future research should include participants prior to their attendance at a post-secondary institution, as well as participants in various stages of their education, to examine the applicability of the Gati, Krausz, and Osipow (1996) model.

In conclusion, this study supported our main hypothesis regarding the interrelationships of several key variables with career decision-making difficulties. In particular, the significant negative correlation between career decision-making difficulties and career decision-making self-efficacy suggests the importance of understanding more about this relationship and other variables that may be related. It is particularly important for future research to examine these variables with students beyond first-year university. At present, we plan to conduct such research and we also plan to begin examining possible path models of career decision-making using the CDDQ and career decision-making self-efficacy measures.

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