Career Search Self-Efficacy, Family Support, and Career Indecision With Italian Youth
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Family support has been found to influence both career self-efficacy beliefs and career decision making. The purpose of this study was to verify whether career search self-efficacy could mediate the relationship between family support and career indecision. Using a sample of 253 Italian youth, the study found that, for male adolescents attending a university-preparation high school, career search self-efficacy partially mediated the relationship between family support and career indecision. Contrary to expectations, for female adolescents there was no direct relationship between family support and career indecision; however, family support was directly associated with career search self-efficacy and career search self-efficacy was associated with career indecision.

**Keywords:** self-efficacy, youth, cross cultural

Family processes have been an important area of inquiry in relation to career development, and the quality of these interpersonal relationships can influence school-career decisions either positively or negatively (Blustein, Prezioso, & Schulteiss, 1995; Blustein, Walbridge, Friedlander, & Palladino, 1991; Bratcher, 1982; Grotevant & Copper, 1988; Herr & Lear, 1984; Kinnier, Brigman, & Noble, 1990; Larson & Wilson, 1998; Leong, Hartung, Goh, & Gaylor, 2001; Lopez, 1986, 1989; Lopez & Andrews, 1987; Lucas, 1997; Luckey, 1974; Penick & Jepsen, 1992; Ryan, Solberg, & Brown, 1996). A number of studies have focused on evaluating relationships between the degree of perceived availability of family support (Russell & Cutrona, 1984) and self-efficacy beliefs. For example, Ferry, Fouad, and Smith (2000) have found that parents’ encouragement was directly
related to self-efficacy beliefs, outcome expectations and interests for occupations that involve math and science. Kenny and Bledsoe (2005) found that perceived family support is associated with level of vocational adaptability. Recently, Wolfe and Betz (2004) found that the parental relationship was related to both career decision-making self-efficacy and career indecisiveness. Lent, Brown, Nota, and Soresi (2003) found that social support was indirectly related to career choice through self-efficacy.

Adolescents are in a developmental phase of self-exploration that includes examination of various career roles (Super, Savickas, & Super, 1996; Blustein & Flum, 1999). Drawing from self-efficacy theory (Bandura, 1997), Solberg, Good, Fischer, Brown, and Nord (1995) found that individuals reporting stronger career search self-efficacy beliefs are more likely to engage in exploration behavior. Career search self-efficacy refers to the degree of confidence individuals have in their ability to successfully engage in career search activities (Solberg, 1999; Solberg, Good, & Nord, 1994; Taylor & Betz, 1983; Taylor & Popma, 1990). Family is believed to play a central role in the development of career search self-efficacy when it creates an atmosphere that encourages active exploration of one’s environment and thereby offers support and opportunity for mastery experiences that are important antecedents to developing strong self-efficacy expectations (Ryan, Solberg, & Brown, 1996). Healthy family systems are also believed to positively impact career decision making because such systems help youth establish a stable identity structure (Ainsworth, 1989; Ainsworth & Bell, 1974; Bowlby, 1988). In summary, positive and healthy family support provides the developmental context for adolescent youth to establish strong career search self-efficacy expectations and the ability to engage in career decision making.

There remains a number of youth who struggle with making future decisions, and there is reason to believe that higher levels of indecision are associated with higher levels of ambivalence, anxiety, and frustration, as well as possessing an external locus of control, and lower decisional self-efficacy beliefs (Fuqua, Blum, & Hartman, 1988; Lucas & Epperson, 1990; Nota & Soresi, 2004; Osipow, 1999; Wanberg & Muchinsky, 1992). Nota (1999) found that in a sample of predominately female Italian youth, more than a third were classified as highly undecided with respect to: (a) not having decided which study course to pursue, (b) not possessing enough information about themselves or about college, (c) needing help and support to make a decision, and (d) feeling that their career efforts would be likely frustrated by external factors that they deemed difficult to control. These youth were also characterized by low career decision-making self-efficacy beliefs, higher maladaptive behaviors, and lower social competence. This indicates that many Italian youth, especially female, may be at risk with regard to making poor decisions and therefore at risk for being unsatisfied in occupations they will eventually obtain (Osipow, 1999; Soresi, 2000; Wanberg & Muchinsky, 1992), and that career indecision should be considered a multidimensional construct (Betz, 1992; Newman, Gray, & Fuqua, 1999; Santos & Coimbra, 2000; Wanberg & Muchinsky, 1992). Kelly and Lee (2002), for example, examined a
number of career decision scales and identified six factors ranging from lack of information to choice anxiety. Therefore, although distinctions need to be made between normal indecision, which occurs when individuals need information about themselves or occupational opportunities, indecision that arises from indecisiveness and identity diffusion, and trait anxiety (Betz, 1992; Lewko, 1994; Santos & Coimbra, 2000), youth who experience high levels of career indecision are at risk of not being able to take advantage of vocational development opportunities and for making less satisfactory career choices (Nota, 1999; Nota & Soresi, 2004; Osipow, 1999).

The present study seeks to extend research investigating the role of family support, career search self-efficacy, and career decision making by using a sample of Italian high school youth (Lent et al., 2003). Although much of the research on career development involves United States samples, the increasing globalization of the occupational landscape increases the need to investigate the cross-cultural validity of career development theory. Compared with traditional United States samples, the Italy sample is remarkable in many ways. Youth in Italy must make significant career choices in middle school by selecting high schools that prepare them directly for the world of work or prepare them to enter a university. High schools often specialize in the type of university preparation they provide, with some emphasizing science and math whereas others emphasize the humanities. High schools that prepare youth to directly enter the world of work also specialize in their offerings in areas ranging from manufacturing, to business, to agriculture. Although youth graduating from occupational preparatory high schools can apply to universities, Soresi and Nota (1998) have clearly shown that students attending university preparatory high schools experience higher levels of decisional and professional self-efficacy and use better decision-making skills.

In summary, research has established links between family support and career decision making (Wolfe & Betz, 2004), career search self-efficacy and career decision making (Solberg, Good, & Nord, 1994), and family support and career search self-efficacy (Ryan et al., 1996; Wolfe & Betz, 2004). Specifically, this study used an Italian sample of high school youth to examine whether the impact of family support on career decision making was mediated by career search self-efficacy. Family support was not expected to impact career decision making directly, but to operate through career search self-efficacy.

**METHOD**

**Participants**

A total of 253 high school youth (145 male and 108 female; mean age: 16.62, SD = 1.45) living within the Padova Province of northern Italy received the survey items as part of their participation in vocational guidance activities. A total of 84 male youth were from a technical high school specializing in preparing for
mechanical occupations (too few females were represented in the sample to be included); 82 youth (23 male and 59 female) were from a university-preparation high school specializing in teaching humanities; and 87 youth (38 male and 49 female) were from a university-preparation high school specializing in math and science. Overall, the female students attending a university-preparation high school numbered 108 and the male students 61.

Measures

All measures were professionally translated into Italian and back-translated into English. No differences were found in the translations.

Family support. Family support was measured using seven items from Russell and Cutrona’s (1984) Social Provisions Scale. The measure evaluates the degree of perceived availability of social support using a five-point scale, from 1 (strongly disagree) to 5 (strongly agree). Sample items include: “There is a family member I can talk to about important decisions in my life,” and “There are family members I can count on in an emergency.” In a study to validate and adapt the instrument to the Italian setting, Ferrari (2005) involved about 764 participants and showed that the items loaded on only one factor, with values ranging from .58 to .79, explaining 41.02% of the variance. Confirmatory factor analyses yielded the following fit indices: $\chi^2 = 80.68$, Goodness of Fit Index (GFI) = .96, Adjusted Goodness of Fit Index (AGFI) = .91. Ferrari found a strong relationship ($r = .72$) between the family support measure and the instrument My Life as a Student (Soresi & Nota, 2003), which investigates the quality of family relationships. Alpha coefficient for the seven items with the current sample was .79. Following the same procedures used by Solberg et al. (1998), the seven items were summed and the average was used as an indicator of family support.

Career search self-efficacy. The Career Search Self-Efficacy Scale (CSES; Solberg, Good, Nord, Holm, et al., 1994) was used to assess the degree of perceived confidence to successfully perform various career-search activities. Items beginning with the phrase “How confident are you in your ability to:” were rated on a 10-point scale ranging from 0 (very little) to 9 (very much). Sample items include: “Identify and evaluate your career values” and “Utilize your social networks to gain employment.”

In a study designed to validate and adapt the instrument to the Italian setting, Ferrari and Nota (in press) analyzed the data of about 764 participants and determined the presence of three factors that explained 48% of the variance. Factor 1 consisted of 10 items ranging from .87 (“Organize and carry out your career plans”) to .66 (“Clarify and examine your personal values”). The majority of items related to personal exploration, and Factor 1 was therefore titled Personal Exploration Self-Efficacy. Factor 2 consisted of six items ranging from .87 (“Evaluate the job requirements and work environment during an interview”) to
The majority of items related to researching potential occupations, and Factor 2 was therefore titled Research Efficacy. The alpha coefficient for the scales was .91 and .84, respectively. The data collected with this instrument significantly correlated with the data collected with the instrument How Much Confidence do I Have in Myself?, which is standardized for the Italian context and investigates self-efficacy beliefs in one’s own abilities to make decisions, to complete tasks and activities, to have emotional self-control, and to successfully deal with different situations and activities (Ferrari & Nota, in press). Following the procedures used by Ryan et al. (1996), the items were averaged as an index of career search self-efficacy and the alpha coefficient for the total scale was .95.

Career certainty and indecision. The Career Decision Scale (CDS; Osipow, Carney, Winer, Yanico, & Koschier, 1976) was used to assess career certainty and career indecision. The CDS contains 19 items. Two items are averaged to comprise the certainty scale and the remaining items were averaged to comprise the indecision scale. The items were rated using a four-point scale ranging from 1 (not at all like me) to 4 (exactly like me). In a study carried out with about 1,000 adolescents to adapt the instrument to the Italian context, the factor analyses conducted with the career indecision items yielded four factors capable of explaining 51.65% of the variance, with the first and third factor perfectly analogous to those proposed by Osipow (1987). The factor loadings for the first factor were between .38 and .77, for the second factor between .44 and .80, for the third between .69 and .74, and for the fourth between .50 and .76. The internal consistency indices were .81 for the career indecision scale and .77 for the career certainty scale. The correlation between the two scales was −.48. The data collected with this instrument correlated with the data collected with the instrument Ideas and Attitudes on School-Career Future, which is standardized for the Italian context and investigates levels of decisionality and confidence in one’s school-career future, the internality with which one’s decisions about the future are faced, and the abilities to gather information about choice (Ferrari, 2005). The internal consistency indices found in this study were .82 for the career indecision scale and .81 for the career certainty scale. To avoid problems of multicollinearity, it was decided to use only the indecision scale for the analyses (Grim & Yarnold, 1998). The 16 items were averaged as an index of career indecision.

Procedure and Data Analysis

Youth completed the survey items in large group testing sessions and received a personalized profile, including interpretations and suggestions. Those who thought it appropriate had the opportunity to benefit from personalized counseling activities.

To determine whether career search self-efficacy mediated the relationship between family support and career indecision, the procedures outlined by Baron and Kenny (1986) and Holmbeck (1997) were used. To establish whether a
mediator model was possible, the first step involved verifying whether there was a direct relationship between family support and career indecision (Figure 1, Model 1). Next, the overall model was tested, which hypothesized a direct relationship between family support and career indecision, between family support and self-efficacy, and between self-efficacy and career indecision (Figure 1, Model 2). To establish evidence for complete mediation, the path between family support and career indecision would be zero with the addition of self-efficacy. Partial mediation would be established if the path between family support and career indecision was reduced with the addition of self-efficacy. The analyses were conducted using Lisrel 8.30 (Jöreskog & Sörbom, 1999).

RESULTS

Correlations and descriptive statistics among the variables for the total sample are provided in Table 1. To assess for possible differences in the three variables, the participants were initially divided into five groups: male youth from the technical-preparation high school, male and female youth from the university-preparation high school specializing in humanities, and male and female youth from the university-preparation high school specializing in math and science. A one-way MANOVA indicated significant differences, Wilks’s Lambda = .90, \( F(12, 651) = 2.19, p = .01 \). Univariate results indicated significantly different results for family support, \( F(4, 252) = 4.80, p < .001 \), and post hoc results indicated that males from the technical high school reported significantly lower family support. Because of these differences and previous results indicating that the effects of family processes on career search self-efficacy may be different between
males and females (Ryan et al., 1996), the sample was divided into three groups. Males were divided into two samples, one for male youth from the technical high school \((n = 84)\) and one that combined males from the university-preparation high schools \((n = 61)\). The third model combined females from both university-preparation high schools \((n = 108)\). Means and standard deviations recorded by each group are shown in Table 2.

### Test for Mediation Effects

For male youth from the technical-preparation high school, a significant relationship between family support and career indecision was found (Figure 2a, Model 1; \(\beta = -.37; T = 3.63\)) indicating that students reporting more family support reported lower career indecision. In Model 2, students reporting more family support were found to report higher career search self-efficacy (Figure 2b; \(\beta = -.39; T = 3.85\)), and students reporting higher career search self-efficacy reported lower career indecision (\(\beta = -.38; T = 3.64\)). Compared with Model 1, the inclusion of career search self-efficacy resulted in reducing the beta value between family support and career indecision (\(\beta = -.22; T = -2.18\)) thus indicating that

#### Table 1

| correlations, Means, and Standard Deviations for the Total Sample \((N = 253)\) |
|---|---|---|---|---|
| 1 | 2 | 3 | M | SD |
| 1. Family support | — | 3.97 | .68 |
| 2. CSSE | .27* | — | 6.21 | 1.05 |
| 3. Career indecision | - .21* | - .39* | — | 2.11 | .43 |

**Note.** CSSE = career search self-efficacy.

*\(p < .001\).

#### Table 2

| Means and Standard Deviations for the Three Groups |
|---|---|---|---|
| | Males in Technical School \((n = 84)\) | Males in University-Preparation School \((n = 61)\) | Females in University-Preparation School \((n = 108)\) |
| | M | SD | M | SD | M | SD |
| 1. Family support | 3.74 | .74 | 4.08 | .57 | 4.09 | .66 |
| 2. CSSE | 6.23 | .91 | 6.20 | 1.11 | 6.19 | 1.13 |
| 3. Career indecision | 2.12 | .42 | 2.11 | .47 | 2.09 | .41 |

**Note.** CSSE = career search self-efficacy.
Male students attending a technical-preparation high school

a) Model 1: Direct Relation Between Family Support and Career Indecision

\[ \beta = -0.37 \]

Family Support \(\rightarrow\) Career Indecision

b) Model 2: Overall Model

\[ \beta = 0.39 \]
\[ \beta = -0.22 \]

Career Search \(\rightarrow\) Self-Efficacy \(\rightarrow\) Career Indecision

Male students attending a university-preparation high school

c) Model 1: Direct Relation Between Family Support and Career Indecision

\[ \beta = -0.32 \]

Family Support \(\rightarrow\) Career Indecision

d) Model 2: Overall Model

\[ \beta = 0.28 \]
\[ \beta = -0.25 \]
\[ \beta = -0.32 \]

Career Search \(\rightarrow\) Self-Efficacy \(\rightarrow\) Career Indecision

Female students attending a university-preparation high school

e) Model 1: Direct Relation Between Family Support and Career Indecision

\[ \beta = -0.01 \]

Family Support \(\rightarrow\) Career Indecision

f) Model 2: Overall Model

\[ \beta = 0.21 \]
\[ \beta = -0.36 \]

Career Search \(\rightarrow\) Self-Efficacy \(\rightarrow\) Career Indecision

Figure 2. Mediation Models Tested for the Three Groups
career search self-efficacy partially mediated the relationship between family support and career indecision. Therefore, although family support continued to be associated with higher reported career indecision, the strength of the relationship was reduced with the addition of career search self-efficacy into Model 2.

The same pattern of results was replicated for male students from the university-preparation high school. Students reporting more family support were also found to report lower career indecision (Figure 2c, Model 1; $\beta = -0.32; T = -2.58$). In Model 2, family support was related to career search self-efficacy (Figure 2d; $\beta = 0.28; T = 2.24$) and career search self-efficacy was related to career indecision ($\beta = -0.32; T = -2.63$). The inclusion of career search self-efficacy resulted in a reduced beta value between family support and career indecision ($\beta = -0.25; T = 2.00$), thereby partially mediating the relationship between family support and career indecision.

Mediation for the sample of female students from a university-preparation high school could not be tested. As indicated in Model 1, there was no relationship between family support and career indecision (Figure 2e; $\beta = -0.01; T = -0.20$), which was necessary to test a mediation model. Although the mediation model could not be tested in Model 2, the results did indicate that female students reporting more family support did report higher career search self-efficacy (Figure 2f; $\beta = 0.21; T = 2.22$) and students reporting more career search self-efficacy reported lower career indecision ($\beta = -0.36; T = -3.92$).

DISCUSSION

This study sought to replicate and extend research investigating the role of family support on career search self-efficacy and the relative contributions of family support and career self-efficacy on career indecision. Specifically, the study examined whether career search self-efficacy mediates the relationship between family support and career indecision. Using a sample of high school–aged Italian youth, the results indicated that, for males, career search self-efficacy partially mediated the relationship between family support and career indecision. Although reported level of family support continued to be related to reported career indecision, the strength of the relationship was reduced with the inclusion of career search self-efficacy into the model. The mediation model could not be tested for female students because family support was not found to be directly related to career indecision. However, for female students, career search self-efficacy related to lower reported career indecision, and family support was related to career search self-efficacy.

This study replicates the study by Ryan et al. (1996) that found that individuals reporting positive family relationships reported stronger career search self-efficacy beliefs. Students who reported higher levels of family support reported stronger
career search self-efficacy expectations. The study also replicates earlier research that has found that individuals reporting stronger career search self-efficacy beliefs also reported lower career indecision (Taylor & Pompa, 1990; Solberg, et al., 1995). One important contribution made by this study includes extension of these results to a sample of Italian youth. A second contribution of the study are the mediation effects found for male youth. Although family support is an important predictor of career decision making, these results indicate that family support plays a role in career decision making through career search self-efficacy. These results have important implications for practice because it indicates that, for male and female youth, interventions designed to increase career search self-efficacy beliefs are important in supporting career development.

These results are consistent with research conducted by Lent et al. (2003), who demonstrated that, for many individuals, social support relates to career choice outcomes indirectly through self-efficacy. Lent et al. found this pattern in relation to individuals scoring high in the artistic, conventional, investigative, social and enterprising Holland themes. For individuals identified as high realistic type, social support was directly related to choice. The results are also consistent with social cognitive career theory which hypothesizes that social supports act both on self-efficacy beliefs and directly on choice behavior (Lent, Brown, & Hackett, 1994, 1996).

Limitations of the study include those associated with conducting survey research. The analyses conducted should not be interpreted as supporting a causal relation between independent variables, mediators, and outcome. Future research should consider experimental or longitudinal research activities that can allow the more specific testing of some variables. Future research should also consider examination of the role of family support and career search self-efficacy in exploratory behaviors. Another limitation of the study was that too few female students from technical-preparation high schools were found to be included. Future research should seek to replicate the study with non-university-bound female students. Future research should also consider replicating the study with youth from different socioeconomic and cultural backgrounds, as well.

REFERENCES


