

The Role of Perceived Parental Influences on the
Career Self-Efficacy of College Students

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There are many people in my life who have been there for me throughout this process, and without them, none of this would have been possible.

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I leave you with the mantra that has gotten me through this past year, "*I think I can, I think I can, I think I can, I think I can...*"

Abstract

This project explored the relationship between perceived parental influences and the career self-efficacy of college students. Previous research related to college student development, parental influences, and career development is presented in order to assess the current body of literature and provide rationale for the present research project. In addition, the author conducted a survey with undergraduate college students to better understand the role that parents play in their career development. Parental influences were found to be positively correlated with students' career self-efficacy. General supportive parenting behaviors seemed more significant than career-specific parenting behaviors. One specific behavior was found to be predictive of students' career self-efficacy. Results are discussed, and implications for counselors are presented.

The Role of Perceived Parental Influences on the Career Self-Efficacy of College Students

The college years are a time of significant exploration and development of individuals (Evans, Forney, & Guido-DiBrito, 1998). Individuals are attending college at a time when they are subsequently in the process of developing autonomy, competence, and identity (Chickering, 1969; Chickering & Reisser, 1993). It is a time when individuals begin to formulate their identity and gain a greater sense of their selves.

One aspect of their identity development is that of their career. The college experience provides students with the opportunity to help develop and prepare for their careers and futures. Presumably, many college students will be faced with challenging decisions regarding their career development during college and thereafter. Young adulthood is typically a crucial time for career decision-making and development (Whiston, & Keller, 2004). It is a time when there is the potential for certain factors and variables to either enhance or detract from college students' experience, particularly with regards to their career development.

It may be imperative to examine the relational influences on the career factors of these individuals (Schultheiss, 2003; Splete, & Freeman-George, 1985). With regards to these relational influences on career development, establishing the influence of the family may be imperative to better understanding the intricacies of career development (Vondracek, Lerner, & Schulenberg, 1986). Families, parents in particular, may play a major role in the occupational and career aspirations of their children.

The purpose of this research project is to explore the association between perceived parental influences and the career self-efficacy of college students. First, the overall development of students during college will be explored in relation to career development to determine the

issues that may be specific to this population. Next, the parental influence on the development of college students will be discussed to provide support for the overall level of influence of parents on their children's lives. Then, previous research will be reviewed on the parental influence with regards to different aspects of career decision-making of college students. Lastly, the results of the study will be analyzed in an effort to better understand the relationship between career development and parental influences and the implications.

Review of Literature

The college experience is a time of self-exploration and growth, where many traditional-age college students experience greater independence, increased decision-making, and a shifting of roles (Hinkelman, & Luzzo, 2007). Previous research related to college student development, parental influences, and career development will be analyzed in order to assess the current body of literature and provide rationale for the present research project. First, the body of literature on psychosocial development and the interaction between psychosocial development and career development will be discussed. Second, research will be examined with regards to the role parents play in the overall development of their children during college. Lastly, the literature around the role of parental influence on college students' career decision-making will be discussed.

Definitions

For the purpose of this research project, the definitions of the succeeding terms are as follows:

- Social Cognitive Career Theory is defined as the role of self-efficacy expectations in an individual's behavior about their career (Lent, Brown, & Hackett, 1996).

- Career Decision-Making Self-Efficacy is defined as individuals' belief in their level of confidence about whether they can successfully engage in tasks associated with making decisions about their career (Betz, Klein, & Taylor, 1996).
- Traditional college-age student is defined as an undergraduate student who attends college during the 18-22 year old time frame (King & Howard-Hamilton, 2000).

College Student Development

When thinking of the role that parents may play in their children's career development during college, it may be important to first look at the psychosocial development of college students and relevant issues during that time to provide context. The college years are a time when individuals experience substantial developmental growth (Evans, Forney, & Guido-DiBrito, 1998).

This population is unique in that most individuals are on their own for the first time while dealing with coinciding issues and concerns. Not only are they experiencing separation from their family for the first time, but they may also be faced with wanting to succeed in their academics; to fit in with their peers and make friends; to determine a career path that best fits while also trying to find themselves (King, & Howard-Hamilton, 2000). In other words, college students are constantly faced with issues or situations that may help determine who they are and their future.

According to Chickering and Reisser's theory of development (1993), students progress along seven vectors which include developing competence, managing emotions, moving through autonomy toward interdependence, developing mature relationships, establishing identity,

developing purpose, and developing integrity. The model can be thought of as one where a task must be developed fully before succeeding to each subsequent task. This model indicated that there was a specific process and timing to the developmental tasks suggesting that students must accomplish these tasks prior to feeling prepared to address career and other issues (Bowers, Dickman, & Fuqua, 2001).

Another developmental theory looking for specifically at career development is that of Donald Super. Super's (1990) career development theory suggests that overall development of individuals cannot be separated from career development issues, and that concerns that affect autonomy, time perspective, and self-esteem must be attended to in order to make satisfying career choices. In other words, the career and personal issues of individuals seem to be related to career development.

The premise that psychosocial development and career development of college students are closely related is supported in the literature. Winston and Polkosnik (1986) looked at the association between interpersonal relationships and perceived control over academic performance of college students. They found that students who were in relationships of greater trust, independence, and individuality were more likely to have greater control of their academic and work performance (Winston, & Polkosnik, 1986). This study sheds light on the association between aspects of psychosocial and career development.

To build upon research in this area, Bowers and her colleagues (2001) examined the relationships between psychosocial development, involvement in career development activities, and employment status of graduating seniors. An association was found between career development activities and psychosocial developmental tasks. This study also supports the premise that psychosocial development and career development are related.

Upon examining the psychosocial and career development of college students, it appears that the two are closely related, and psychosocial development may be necessary for an individual to be successful in their career development (Bowers et al., 2001; Chickering, & Reisser, 1993; Super, 1990; Winston, & Polkosnik, 1986). It may also be necessary to examine the relational influences, parental influences in particular, on the psychosocial development of college students.

Parental Influence on College Students' Development

A significant amount of an individual's time prior to attending college is spent with one's family, particularly one's parents. Therefore, it is likely that one's parents have a substantial amount of influence on their development throughout the years. Even though students have increased dependence during college, and the amount of time spent with one's parents may decrease, it would still seem likely that parents would have an impact on his/her development (Hinkelman, & Luzzo, 2007). It may be important to further explore the relationship between family variables and their influence on an individual's psychosocial development during college.

There are many parent variables that have been found to be associated with college students' psychosocial development (Hahs-Vaughn, 2004; Hickman, Bartholomae, & McKenry, 2000; Hofer, 2008; Kenny, 1990; Luyckx, Soenens, Goossens, & Vansteenkiste, 2007). Those variables include parenting style, parental attachment, parental regulation, and parental level of education. These factors have been found to have an influence on students' academic performance, identity formation, self-esteem, social competence, autonomy, satisfaction with the college experience, and nonacademic experiences.

Parenting style is one variable that may influence college students' development.

Hickman et al. (2000) examined the influence of parenting styles on academic achievement. They administered a questionnaire to a sample of college freshman to determine the relationship. It was found that authoritative parenting style was positively correlated with student's academic adjustment (Hickman et al., 2000). In other words, those parents exhibiting warmth and fair discipline styles had children with greater academic achievement in college. This research suggests that parenting style may be associated with college students' academic success. However, it should be pointed out that the sample was that of college freshmen which may have had an impact on the results. Perhaps parenting style may be more relevant for college freshmen because they are still new to the college experience.

To build upon the previous study, Luyckx and colleagues (2007) explored the association between parenting styles, specifically the autonomy support vs. psychological control dimension, on students' academic adjustment. A survey was given to students at a university in Belgium in three waves. Luyckx et al. (2007) found that not only is there a significant association between parenting style and academic adjustment, but it was mediated by the level of identity formation. In other words, the relationship between parenting style and academic adjustment depended on how much they identified with their chosen major. It should be noted that this study also used a sample of college freshmen which may have had an influence on the findings.

Another variable that may influence college student's development is parental attachment. Kenny (1990) examined the association between perceived parental attachment and social competence (assertion, dating competence and career maturity). The researcher studied a sample of college seniors by administering a survey. The findings indicate that overall, parental attachment was perceived as being positive by college students in the study. Also, it was found that the quality of attachment was associated with only one aspect of social competence – career

competence (Kenny, 1990). This study shed light on the notion that parental attachment may not always be negative, and having that attachment with a parent may actually create a sense of support and security for college student seniors. It also demonstrates that parental attachment may be influential in college students' social development.

The level of parent education may be another factor influencing the development of college students. Hahs-Vaughn (2004) explored the influence of parents' education level on college students by examining the differences in the experiences of first generation and non-generation students. Significant differences were found between the two groups on anticipated highest level of education, entrance exam score, nonacademic experiences, and educational aspirations (Hahs-Vaughn, 2004). In other words, parental education appears to have an effect on the academic and social development of students.

Parental regulation may also be important to explore when thinking of student development. Hofer (2008) looked at the relationship between the level of parent-child communication and its impact on students' transition to college. First-year and second-year students, as well as their parents, were given a survey with close-ended and open-ended questions to determine the association. Hofer (2008) found that those students with parents who communicated frequently and regulated their academics and behavior had the lowest autonomy and were the least happy with their college experience. According to Chickering and Reisser's theory (1993) developing autonomy is a significant task during college. This study sheds light on the idea that too much parental regulation may be detrimental to students' psychosocial development, specifically developing autonomy.

As the previously mentioned research has stated, the psychosocial development of college students' may be impacted by parental factors. These factors include parenting style,

parental attachment, parental regulation, and parental level of education. Previous research has found that college students' career and psychosocial development are related, therefore, it would seem likely that since parental factors were associated with psychosocial development there would also be an association between parental factors and career development. It may be crucial to look at previous research on the relationship between parental variables and college students' career development.

Parental Influence on College Students' Career Decision-Making

College students perceive family to be a significant influence in their career decisions (Bright, Pryor, Wilkenfeld, & Earl, 2005). Moreover, parents believe they are the most influential influence on their children's career development in college (Taylor, Harris, & Taylor, 2004). There have been many studies done that have looked at different aspects of career decision-making of college students including career commitment and decidedness, career indecision, the process of career decision making, and career self-efficacy (Blustein, Walbridge, Friedlander, & Palladino, 1991; Graef, Wells, Hyland, & Muchinsky, 1985; Hargrove, Creagh, & Burgess 2002; Kinnier, Brigman, & Noble, 1990; Larson, & Wilson, 1998; Lease, & Dahlbeck, 2009; Lucas, 1997; O'Brien, Friedman, Tipton, & Linn, 2000; O'Neil, Ohlde, Tollefson, Barke, Piggott, & Watts, 1980; Scott, & Mallinckrodt, 2005; Whiston, 1996). There have been inconsistent and weak findings among the body of literature.

One aspect of career decision-making that has been researched is that of career commitment and decidedness. Graef and her colleagues (1985) examined life history information and vocational decidedness among a sample of 200 college students. None of the parental variables which included socio-economic status, parenting style, and warmth were found to be significant predictors of vocational decidedness (Graef et al., 1985). The study did, however,

shed light on gender differences in career decision making. They found that the vocational decidedness paradigm differs in males and females (Graef et al., 1985).

To build upon the research in the area of career commitment and decidedness, Blustein and his colleagues (1991) looked at psychological separation and parental attachment in relation to career commitment and decidedness by looking at a sample of undergraduate students. This study also found a difference among males and females. For female students, parental attachment (both parents) and conflictual independence (both parents) were positively correlated with career commitment (Blustein et al., 1991). For male students, however, paternal attachment, attitudinal dependence (father) and conflictual dependence (father) were predictive of career commitment (Blustein et al., 1991). In other words, both attachment to and independence from parents seems important in committing to career choices for young adults.

Another aspect of career decision-making among college students is that of career indecision. Kinnier and his colleagues (1990) administered a self-report survey to undergraduate and graduate students to better understand the association between family enmeshment and career indecision. It was found that those students who were overly dependent on their families (family enmeshment) were more likely to experience challenges in their career decision making (Kinnier, Brigman, & Noble, 1990). This study helps shed light on parental/familial variables that may hinder an individuals' career development.

To add to the research in the area of career indecision, Whiston (1996) examined the association between career indecision and family environment in a sample of 214 undergraduate students. A significant relationship was found between women who reported highly organized and controlling families and career indecision (Whiston, 1996). This suggests that female college

students from families with high organization and control may experience difficulties in making career decisions.

Along with career commitment and decidedness, and career indecision, the process of making career decisions has been researched. The correlates and variables affecting career decisions were examined among high school students and college students using the Career Factor Checklist (CFC) (O'Neil et al., 1980). It was found that 50% of the subjects reported that family factors influenced them very much or somewhat in the process of career decision-making, however, individual factors (abilities, interests, self-expectancies, etc.) had the most influence (O'Neil et al., 1980). The findings are inconsistent with how parents perceive their influence on their children during college (Taylor, Harris, & Taylor, 2004). Perhaps, these findings may have been due to the sample being comprised of high school students and college students.

Larson and Wilson (1998) also observed family influences on the career decision-making process except with a sample comprised of solely college students. This study looked at the problems students may face in the career decision-making process. Family income was found to not be related to problems in the career decision process (Larson, & Wilson, 1998). It was also found that the level at which students experienced intimidation in their family of origin directly predicted the amount of problems in the career decision-making process. It appears that while family income does not seem to influence the career decision-making process of young adults, the parent-child relationship characterized by intimidation does seem to have an effect on career decision problems.

Career decision-making self-efficacy, a major construct of the SCCT, is another facet of career decision making to be considered in college students. There have been a decent number of studies that looked at career self-efficacy with some inconsistent results. Some studies found an

association between family/parent variables and career self-efficacy (Hargrove et al., 2002; Lease, & Dahlbeck, 2009; Scott, & Mallinckrodt, 2005; Whiston, 1996) while others found no connection or a weak one (Blustein et al., 1991; Lucas, 1997; O'Brien et al., 2000).

Several studies looked at the association between career self-efficacy and psychological separation with fairly consistent findings (Blustein et al., 1991; Lucas, 1997; O'Brien et al., 2000). Blustein and his colleagues (1991) hypothesized that young adults who report problems in psychological separation from their parents would experience lower levels of career decision-making self-efficacy; however, their hypothesis was not supported. Consistent with previous findings, Lucas (1997) also did not find a relationship between career self-efficacy and psychological separation from parents across a sample of 247 college students. Another group of researchers looked at psychological separation (in combination with attachment) on career self-efficacy among a sample of female students, and found a weak connection between family variables and career self-efficacy (O'Brien et al., 2000). Perhaps there is something about the college student population that can explain the lack of an association between career self-efficacy and psychological separation.

While some previous research has not found an association between parental variables and career self-efficacy in college students, other research has found that there may be family variables that are associated with career self-efficacy. Hargrove and his colleagues (2002) found family factors that may enhance and impede career decision-making self-efficacy. It was found that conflict in the family was negatively associated with career self-efficacy while families with an achievement orientation and who promoted freedom of expression enhanced career self-efficacy of young adults (Hargrove et al., 2002).

Whiston (1996) looked at family interaction patterns and career self-efficacy. She examined this association among undergraduate college students by giving them a survey. It was found that career self-efficacy with regards to using occupational information was associated with families with an intellectual-cultural orientation (Whiston, 1996). In other words, families that are more likely to expose their children to intellectual and cultural activities/opportunities may feel more confident about their ability to use occupational information. On the other hand, it was also found that career self-efficacy with regards to occupational information is inversely related to families of an independence and achievement orientation (Whiston, 1996). This finding is inconsistent with other research which suggests that career self-efficacy is enhanced by families with an achievement orientation and encouragement of freedom of expression (Hargrove et al., 2002).

Parental emotional support has been found to be associated with career self-efficacy. Scott and Mallinckrodt (2005) researched female science majors to determine if choosing a major can be explained by parental influence. They studied former participants of a high school program for females interested in science by administering a survey. It was found that science self-efficacy was negatively associated with having fathers who were controlling (Scott, & Mallinckrodt, 2005). In other words, it appears that parents may also play a role in how confident female college students may feel about their knowledge of science.

Another study looked at parental attachment (and parenting styles) in relation to career self-efficacy, and also explored the gender differences. Lease and Dahlbeck (2009) found that maternal attachment, but not paternal attachment, was related to career self-efficacy of women. These findings are inconsistent with previous research that found a weak association between career self-efficacy of women and parental attachment (O'Brien et al., 2000). It was also found

that authoritarian parenting styles predicted the career self-efficacy of females. It appears that the role of parental influences on career self-efficacy may be different for men and women.

The role of parental behaviors was examined in relation to career development. Keller & Whiston (2008) found that five specific parental behaviors predicted career development. This study shed light on the notion that there may be specific parental characteristics that may enhance career development. This study, however, looked at the career development of young adolescents and therefore the findings may not be applicable to college-age students.

Many studies have looked at different parental factors and their influence on different facets of career decision-making of their children during college (Blustein et al., 1991; Graef et al., 1985; Hargrove, Creagh, & Burgess 2002; Kinnier, Brigman, & Noble, 1990; Larson, & Wilson, 1998; Lucas, 1997; O'Brien et al., 2000; O'Neil et al., 1980; Scott & Mallinckrodt, 2005; Whiston, 1996). It may be important to further our understanding of the role that parents have in that development process. Previous research has given a broad overview of the association between different parental variables and the aspects of career decision-making of college students with inconsistent and weak findings. It may be necessary to further explore the association parental variables and career decision-making. It may be necessary to examine specific parental behaviors to determine if there are particular ones that contribute or detract from the career development of their children during college.

The purpose of this study is to (1) describe the relationship between perceived parental influences and the reported career development of college students; (2) determine if specific parental behaviors differentiate between students with high and low career self-efficacy; (3) examine whether the relationship between perceived parental influences and students' reported

career self-efficacy varies with parental educational background. The author chose to survey college students in order to examine these research questions.

Method

Setting

The questionnaire was implemented in a small, public liberal arts college in the northeast region of the United States. The college has about 40 undergraduate programs and 40 graduate programs. The institution is comprised of a predominantly White student population with 75% Caucasian, 6% African American, 3% Hispanic, 1% Asian/Pacific Islander, and approximately .4% Native American. There are slightly more female students (approximately 57%) than male (approximately 43%). About 15.6% of undergraduate students are 25 years old or greater.

Participants

Sixty students enrolled in health science courses participated in this study. Of the sixty participants, two were freshmen, eighteen were sophomores, nineteen were juniors, and twenty-one were seniors. 63.3% of participants were in majors in the professions and academic sciences, 21.7% were of the arts and humanities; 10% were classified as math and sciences; and 5% of the social sciences. The age of the participants ranged from 18 to 69, with a mean of 21.65, median of 20, mode of 19, and a standard deviation of 6.95 years. There were more female participants ($n = 39$, 65%) than male participants ($n = 21$, 35%). The sample was not representative from the setting at which participants were recruited in terms of students' genders. 57% of the population at the location in which the research project was implemented was comprised of female students. Racial and ethnic information was not gathered.

Measures

The questionnaire consisted of three sections, each measuring participants' reported parental influences and career decision-making self-efficacy. In the first section, participants were asked to provide some background information. In the second section, participants were asked to select a parent/guardian who was most concerned about their career issues and the highest level of education of the parent/guardian selected. They were then asked to answer questions about their perceptions of the selected parents' behaviors regarding the participants' career. In the last section, participants were asked to answer questions about their confidence about different aspects of their career.

Demographic information. Students completed a four-item questionnaire that assessed their age, gender, year in school, and current academic major.

Parent Career Behavior Checklist (Keller, & Whiston, 2008). This questionnaire consisted of twenty-three items assessing participants' perceptions of general parenting behaviors (Support scale) and career-specific parenting behaviors (Action scale). Participants responded on a 5-point Likert-type scale measuring the extent to which each statement applies to the parent/guardian selected (1 = Never, 5 = Very Often). The original assessment tool was used on a sample of middle school-aged students (Keller, & Whiston, 2008). The questionnaire was modified to have more relevance among a college student-aged sample (e.g., "My parent expresses interest in various teenage issues that are important to me" was changed to "My parent expresses interest in various college-aged issues that are important to me"). The original PCBC measure had a coefficient alpha of .93 and the coefficient alphas for the subscales were .90 (Support) and .89 (Action). Both subscales were strongly related to the overall measure with the Support subscale, $r = .93$ and Action subscale, $r = .92$ (Keller, & Whiston, 2008).

Career Decision Self-Efficacy Scale – Short Form (CDSE-SF) (Betz, Klein, & Taylor, 1996). This questionnaire consisted of twenty-five items assessing the students' career self-efficacy (e.g., "Select one major from a list of majors that you are considering"). The scale is comprised of five subscales which measure self-appraisal, occupational information, goal selection, planning, and problem solving. Participants responded on a 5-point Likert-type scale measuring the level of confidence participants felt about these different aspects of their career (1 = No Confidence At All, 5 = Much Complete Confidence). The scale originally used a 10-level response continuum (Betz, Klein, & Taylor, 1996; Betz, & Voyten, 1997). However, reliability and validity were found to be as good or better for a 5-level response continuum (Betz, Hammond, & Multon, 2005). Consistent high internal reliability coefficients have been found for the entire scale and the five subscales. The five subscales for the short form of the Career Decision Self-Efficacy Scale using a 5-level response continuum had coefficient alphas ranging from .78 to .87 and .93 to .95 for the total score (Betz, Hammond, & Multon, 2005). Correlations of the CDSE-SF five subscales with career indecision ranged from -.30 to -.63 for the 5-level response continuum suggesting criterion-related validity (Betz, Hammond, & Multon, 2005).

Procedure

The study entailed the administration of a questionnaire to participants in two undergraduate courses in the Department of Health Science, by the course instructors. Participants were made aware of the project by their course instructor. The primary researcher brought a stack of packets to the course instructor prior to the agreed upon date for the instructor to distribute them. On the day of administration, the course instructor passed out the packets to participating students which included an informed consent cover sheet which contained a

description of the study, followed by the questionnaire. The students were asked to read the consent form and were told that completion of the questionnaire demonstrated consent.

Participants were given information about the procedures that were to be used for confidentiality purposes. The participants were also made aware that their participation was voluntary and that they could have withdrawn from the study at any time. They were also informed of the services available if they experienced adverse effects during or after completion of the survey.

The questionnaire consisted of 48 questions and took approximately twenty-five minutes to complete. When participants were finished, they placed the completed questionnaire in an envelope at the front of the room. Once all students were finished, the envelope was sealed by the course instructor and collected by the primary researcher. Thereafter, data was kept in a locked filing cabinet by the primary researcher to be utilized in this project.

Data Analysis

The data from the questionnaire was analyzed by entering it into a statistical analysis program. The first research question (describe the relationship between perceived parental influences and the reported career development of college students) was analyzed by performing a Pearson's correlation analysis. A hierarchical multiple regression analysis was performed to examine the second research question (determine if specific parental behaviors differentiate between students with high and low career self-efficacy). Lastly, a multiple regression analysis was carried out to look at the third research question (examine whether the relationship between perceived parental influences and students' reported career self-efficacy varies with parental educational background).

Results

Perceived parental influences was positively correlated with reported career self-efficacy ($r = .48, p < .01$). More specifically, perceived parental supportive behavior was positively correlated with reported career self-efficacy ($r = .51, p < .01$). In other words, as perceived parental supportive behavior increases, the career self-efficacy of college students increases. Perceived career-specific parent behavior was also positively correlated with reported career self-efficacy ($r = .37, p < .01$), although the relationship was not as strong as with parent support and career self-efficacy. This indicates that with increased career-specific parent behaviors there is greater career self-efficacy of college students.

In looking more specifically at the variables, almost all of the career decision self efficacy variables were significantly associated with parental behaviors. The Pearson's correlation coefficients ranged from .17 to .55. The strongest correlation was found between parent support with self appraisal and parent support with goal setting ($r = .55, p < .01$). In other words, as parent supportive behavior increases, it appears that students' confidence in assessing and determining their strengths and weaknesses as well as confidence in setting career goals increases.

Upon examining the demographic variables in relation to overall parental behavior and career self-efficacy, it appears that age was significantly negatively correlated with both variables. Age was negatively correlated with parental behavior ($r = -.51, p < .01$) and career self-efficacy ($r = -.32, p < .05$). In other words, as students' age increases, the amount of parental behavior and career self-efficacy decreases. See Table 1 in the Appendix for a correlation matrix with all the study variables.

In order to determine which specific parental behaviors differentiate between students' self-efficacy scores, a multiple regression analysis was performed. Since age was found to be correlated with parental behavior and career self-efficacy, age was entered in the first step. The 23 items of the PCBC were entered in the second step. After controlling for age, career self-efficacy was predicted by one item of the PCBC which was part of the Support subscale (My parent tells me he or she has high expectations for my career) ($\beta = .420$, $p = .033$). It appears that the level of expectations parents have for their children's career has an impact on how confident students feel about making career decisions.

Table 2

*Hierarchical Logistic Regression for Parent Variables
Predicting Career Self-Efficacy*

Predictor	B	SE	β	t	Sig.
Age	-.476	.504	-.206	-.944	.351
My parent tells me he or she has high expectations for my career.	5.565	2.514	.420	2.213	.033
Constant	90.226	28.085		3.213	.003

A multiple regression analysis was also carried out to better understand whether the relationship between perceived parental influences and reported career self-efficacy varied by parental educational background. Highest level of parental education and parental influences explained 20.6% of the variance in self-efficacy scores ($R^2 = .206$). Parental education was not found to be significant ($\beta = -.058$, $p = .622$). It seems that highest level of parental education did not have an impact on the overall relationship between perceived parental influences and career self-efficacy.

Table 3

*Hierarchical Logistic Regression for Parent Education
Predicting Career Self-Efficacy*

Model		B	SE	β	t	Sig.
1	Constant	65.148	8.758		7.439	.000
	PCBC	.436	.105	.480	4.162	.000
2	Constant	66.989	9.566		7.003	.000
	PCBC	.437	.105	.481	4.144	.000
	Parent Education	-.815	1.644	-.058	-.496	.622

Note: Total R^2 for the model was .206. PCBC = Parent Career Behavior Checklist.

Discussion

The project tested the role of perceived parental influences on college students' career self-efficacy, whether there were specific parental behaviors that predicted career self-efficacy, and whether those relations varied with parental level of education. The first research question focused on the overall relationship between parental influences and career self-efficacy of college students. Perceived parental influences were found to be associated with college students' career development which supports previous research that parents seem to be an integral part of their children's lives during college (Bright et al., 2005; Hinkelman, & Luzzo, 2007).

More specifically, parental influences were positively associated with the career development of college students. General supportive parenting behaviors seemed more significant than career-specific parenting behaviors. This finding is somewhat supportive of previous research in the area of family interaction patterns and career self-efficacy and adds to the literature on parental variables that appear to enhance career self-efficacy. However, literature in this area is mixed. Hargrove et al. (2002) found that parents who promoted freedom

of expression, which may be thought of as supportive parent behavior, had children with higher levels of career self-efficacy while Whiston (1996) reported an inverse relationship.

The second research question was concerned with determining specific parental behaviors that seem to predict career self-efficacy. The finding that one parental behavior (My parent tells me he or she has high expectations for my career) predicted career self-efficacy suggests that college students need to know that their parents believe in their abilities and thus have high expectations for them. Although no previous research examined specific parental variables on college students' career self-efficacy, this finding is aligned with previous research which found that parent expectations were predictive of the career self-efficacy of young adolescents (Keller, & Whiston, 2008). Although this study examined middle school students as opposed to college students, it appears that the parental behavior of having high expectations may be significant at various times in their children's career development. Future research may wish to expand our knowledge in this area by carrying out a longitudinal study to determine if this parental behavior is salient over time.

The third research question examined the impact of parental level of education on the relationship between perceived parental influences and career self-efficacy. It appears that parental level of education does not have an impact on the relationship between parental influences and career self-efficacy. This finding is inconsistent with the finding that parent education seemed to have an impact on college students' academic and social development (Hahs-Vaughn, 2004). Considering career development and psychosocial development are closely related (Winston, & Polkosnik, 1986), it would seem likely that parental level of education would be significant in college students' career development as well. This could be

due to the fact that the survey asked participants to report the highest level of education of the parent who was most concerned about their career issues.

Counseling Implications

The findings of the current research project may be beneficial for counselors working with parents of young adults. Counselors should stress and encourage the importance of parents' relationships with their children during college because of their significance in their children's career development. Relationships portrayed by overall supportive behavior, as well as high expectations, are important and seem to promote healthy career development, particularly in how confident students feel about making career decisions. It may also be helpful for counselors to develop and implement career resources and programs to educate parents on how they can be most helpful in their children's career development during college. It may also be effective to include children and their parents in such programs to help model and foster healthy relationships.

Findings may also suggest that some college students may be at a disadvantage. The current project did not specifically examine first-generation college students who may be at a disadvantage because their parents may have a lack of knowledge about career planning (Gibbons, & Shoffner, 2004). However, it did look at the level of parental education the participant selected as being most concerned with his/her career development. Even though parental level of education did not seem to have an influence on the relationship between parental influences and career self-efficacy, the results seem to suggest that increased parent supportive behaviors and career-specific parent behaviors is associated with increased career self-efficacy among college students. Conversely, it would also seem likely that lower levels of parent supportive and career-specific behaviors would be associated with decreased career self-

efficacy. It may be beneficial for counselors to reach out to those students and parents with less support.

In thinking of the parent-child relationship, it may also be important to consider the counselor-client relationship. Findings may suggest that perhaps a counseling relationship similar to that of the parent-child relationship (warm, supportive) may be important when working with college students on their career-related issues. Future research may examine the role that counselors play in the career self-efficacy of their clients in a college setting.

Limitations

The results need to be considered in lieu of several potential limitations. First, the study was that carried out was correlational. Therefore, while a relationship between parental influences and career self-efficacy can be observed, it cannot be proven that one variable causes a change in the other variable.

Also, the researcher of the current project implemented a survey method which may have been limiting in two ways. One, there was the potential for self-report bias because participants may have answered items on the survey the way they thought they should answer them. Second, the survey did not ask participants to make comments and all of the items were based on a 5-point Likert-type scale. Therefore, the findings of the project may lack depth and richness. Future research may account for this by carrying out a qualitative study in which participants are interviewed or by having focus groups after the survey portion of the study is completed. Also, it may be possible to allow participants to make comments at the end of the survey or answer some open-ended questions.

The sample size of the current research project was small and therefore lacks generalizability. In other words, the results of the project may not be relevant for all college

students. Also, because the sample was not representative of the student population (particularly with regards to gender and year in school) in which the study was implemented, the findings may not be applicable to all of the students at that particular institution. This could be due to the survey being given to two courses in one academic program at the institution. It is recommended that students from a variety of academic programs be studied in order to get a better sampling of the overall student population at this particular institution.

Conclusion

This research project, based on a sample of undergraduate college students, sheds light on the relationship between perceived parental influences and the career self-efficacy of young adults. Parental influences were found to be positively correlated with students' career self-efficacy. General supportive parenting behaviors seemed more significant than career-specific parenting behaviors, although both were found to be highly significant. The specific parental behavior of having high expectations for their children's career was found to be predictive of students' career self-efficacy. These findings add to the current body of literature in this particular area which has previously found mixed or weak results. The results have relevance particularly for those helping professionals who work with parents of college students and/or college students themselves.

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Appendix A
QUESTIONNAIRE

I. Please answer the following questions in each section of the packet. Remember that all of your answers will remain anonymous. Please do not write your name anywhere on the packet. Thank you for taking the time to carefully fill out the following questionnaire honestly.

Age: _____

Gender: (M or F) _____

Year in school: (Mark one) Freshman Sophomore Junior Senior

Current major: _____

II. Parent Career Behavior Checklist (adapted by, Keller & Whiston, 2008).

Directions: *Select the parent/guardian who is most concerned about your career issues.*

Parent/guardian you selected: (i.e., mother, father, stepmother, etc.) _____

Highest level of education of parent/guardian selected: (Circle one)

1	2	3	4	5
No college	2-year degree	4-year degree	Master's	Doctorate

For each statement below, please read carefully and indicate the degree to which each statement applies to the parent/guardian you selected above by marking your answer according to the key. Mark your answer by circling the appropriate number under each question.

1	2	3	4	5
Never	Almost Never	Sometimes	Often	Very Often

1. My parent tells me he or she is proud of me.

1	2	3	4	5
---	---	---	---	---

2. My parent encourages me to ask questions about different jobs.

1	2	3	4	5
---	---	---	---	---

3. My parent has encouraged me to be involved in extracurricular activities.

1	2	3	4	5
---	---	---	---	---

4. My parent expresses interest in various college-aged issues that are important to me.

1	2	3	4	5
---	---	---	---	---

5. My parent has encouraged me to participate in a structured career development workshop offered by my college, church, etc.

- | | | | | | |
|--|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 |
| 6. My parent tells me he or she loves me. | 1 | 2 | 3 | 4 | 5 |
| 7. My parent has given me written material about specific careers. | 1 | 2 | 3 | 4 | 5 |
| 8. My parent encourages me to make my own decisions. | 1 | 2 | 3 | 4 | 5 |
| 9. My parent asks me what careers I am considering for my future. | 1 | 2 | 3 | 4 | 5 |
| 10. My parent tells me about specific careers. | 1 | 2 | 3 | 4 | 5 |
| 11. My parent has shown me where to find information about careers in the library or bookstore. | 1 | 2 | 3 | 4 | 5 |
| 12. My parent encourages me to try new things. | 1 | 2 | 3 | 4 | 5 |
| 13. My parent tells me he or she has high expectations for my career. | 1 | 2 | 3 | 4 | 5 |
| 14. My parent has helped me understand the results from career tests or interest assessments I have taken. | 1 | 2 | 3 | 4 | 5 |
| 15. My parent encourages me to choose whatever career I want. | 1 | 2 | 3 | 4 | 5 |
| 16. My parent helps me feel better when I tell him or her I am worried or concerned about choosing a career. | 1 | 2 | 3 | 4 | 5 |
| 17. My parent has given me written material about specific graduate or professional schools/programs. | 1 | 2 | 3 | 4 | 5 |
| 18. My parent has supported me when I have told him or her that I am interested in a specific career. | 1 | 2 | 3 | 4 | 5 |
| 19. My parent has talked to me about the steps involved in making difficult decisions. | | | | | |

1 2 3 4 5
 20. My parent has encouraged me to take interest assessments or career tests offered by my school.

1 2 3 4 5

21. My parent really tries to understand my thoughts, feelings, and opinions about various topics.

1 2 3 4 5

22. My parent has encouraged me to consider many different educational and career options.

1 2 3 4 5

23. My parent encourages me to talk to him or her about my career plans.

1 2 3 4 5

III. Career Decision-Making Self-Efficacy Scale – Short Form (CDMSES-SF; Betz, Klein & Taylor, 1996).

Directions: *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 key. Mark your answer by circling the appropriate number under each question.*

1	2	3	4	5
No Confidence At all	Very little Confidence	Confidence	Moderate Confidence	Much Complete Confidence

HOW MUCH CONFIDENCE DO YOU HAVE THAT YOU COULD:

1. Find information in the library about occupations that you are interested in.

1 2 3 4 5

2. Select one major from a list of majors that you are considering.

1 2 3 4 5

3. Make a plan of your goals for the next five years.

1 2 3 4 5

4. Determine the steps you take if you are having academic trouble with an aspect of your chosen major.

1 2 3 4 5

5. Accurately assess your abilities.

1 2 3 4 5

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

- | | 1 | 2 | 3 | 4 | 5 |
|--|---|---|---|---|---|
| 7. Determine the steps you need to take to successfully complete your chosen major. | 1 | 2 | 3 | 4 | 5 |
| 8. Persistently work at your major or career goal even when you get frustrated. | 1 | 2 | 3 | 4 | 5 |
| 9. Determine what your ideal job would be. | 1 | 2 | 3 | 4 | 5 |
| 10. Find out employment trends for an occupation over the next ten years. | 1 | 2 | 3 | 4 | 5 |
| 11. Choose a career that will fit your preferred lifestyle. | 1 | 2 | 3 | 4 | 5 |
| 12. Prepare a good resume. | 1 | 2 | 3 | 4 | 5 |
| 13. Change majors if you did not like your first choice. | 1 | 2 | 3 | 4 | 5 |
| 14. Decide what you value most in an occupation. | 1 | 2 | 3 | 4 | 5 |
| 15. Find out the average yearly earning of people in an occupation. | 1 | 2 | 3 | 4 | 5 |
| 16. Make a career decision and then not worry whether it was right or wrong. | 1 | 2 | 3 | 4 | 5 |
| 17. Change occupations if you are not satisfied with the one you enter. | 1 | 2 | 3 | 4 | 5 |
| 18. Figure out what you are and are not ready to sacrifice to achieve your career goals. | 1 | 2 | 3 | 4 | 5 |
| 19. Talk with a person already employed in the field you are interested in. | 1 | 2 | 3 | 4 | 5 |
| 20. Choose a major or career that will fit your interests. | 1 | 2 | 3 | 4 | 5 |
| 21. Identify employers, firms, and institutions relevant to your career possibilities. | 1 | 2 | 3 | 4 | 5 |

22. Define the type of lifestyle you would like to live.

1 2 3 4 5

23. Find information about graduate and professional schools.

1 2 3 4 5

24. Successfully manage the job interview process.

1 2 3 4 5

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

1 2 3 4 5

Appendix B

STATEMENT OF INFORMED CONSENT

The purpose of this research project is to examine the relationship between perceived parental influences and career decision-making self-efficacy of college students. Specific perceived parental behaviors will be studied in relation to individuals' level of confidence about whether they can successfully engage in tasks associated with making decisions about their career (Betz, Klein & Taylor, 1996). This research project is also being conducted in order for the primary researcher to complete her master's thesis for the Department of Counselor Education at The College at Brockport, State University of New York.

In order to participate in this study, your informed consent is required. You are being asked to make a decision whether or not to participate in the project. If you want to participate in the project, and agree with the statements below, your completion of the survey signifies your consent. You may change your mind at any time and leave the study without penalty, even after the study has begun.

I understand that:

1. My participation is voluntary and I have the right to refuse to answer any questions.
2. My confidentiality is guaranteed. My name will not be written on the survey. There will be no way to connect me to my written survey. If any publication results from this research, I would not be identified by name.
3. There will be no anticipated personal risks or benefits because of my participation in this project.
4. My participation in the research will not affect my grades or class standings.
5. My participation involves reading a written survey of 48 questions and answering those questions in writing. It is estimated that it will take approximately 25 minutes to complete the survey.
6. Approximately 100 people will take part in this study. The results will be used for the completion of a master's thesis by the primary researcher.
7. Data will be kept in a locked filing cabinet by the primary researcher. Data will be destroyed by shredding when the research has been accepted and approved.

I am 18 years of age or older. I have read and understand the above statements. All my questions about my participation in this study have been answered to my satisfaction. I agree to participate in the study realizing I may withdraw without penalty at any time during the survey process. Returning the survey indicates my consent to participate.

In the event you experience adverse effects during or following completion of the survey, you may contact the primary researcher for counseling services. You may also speak with a counselor at the Counseling Center located in Hazen Hall. You may contact the Counseling Center by phone at (585) 395-2207 or by e-mail at askacounselor@brockport.edu.

If you have any questions you may contact:

Primary Researcher	Faculty Advisor
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Table 1

Correlation Matrix for Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Support	--	-.72**	.94**	.51**	.55**	.35**	.55**	.39**	.40**	-.61**	.09	-.09	.01	.11	-.03
2. Action		--	.91**	.37**	.40**	.17	.35**	.33**	.34**	-.30*	.02	.10	.00	.15	.08
3. Total PCBC			--	.48**	.52**	.29*	.49**	.39**	.40**	-.51**	.06	-.01	-.16	.14	.02
4. Total CDSE				--	.92**	.83**	.78**	.92**	.87**	-.32*	.18	.12	.11	.17	-.05
5. Self Appraisal					--	.65**	.79**	.80**	.75**	-.35*	.27*	.08	-.25	.19	-.11
6. Occupational Information						--	.48**	.80**	.63**	-.19	.15	.11	-.21	.11	.01
7. Goal Setting							--	.58**	.55*	-.23	.07	.06	-.18	.11	-.21
8. Planning								--	.78**	-.26*	.15	.18	-.34**	.13	.04
9. Problem Solving									--	-.33*	.14	.10	-.19	.18	.03
10. Age										--	-.22	.23	-.06	-.04	-.02
11. Gender											--	-.05	.34**	-.14	-.23
12. Year in School												--	.16	.05	-.04
13. Major													--	-.08	.18
14. Parent Selected														--	.02
15. Parent Education															--

Note. * $p < .05$; ** $p < .01$

Table 2

*Hierarchical Logistic Regression for Parent Variables
Predicting Career Self-Efficacy*

Predictor	B	SE	β	t	Sig.
Age	-.476	.504	-.206	-.944	.351
My parent tells me he or she has high expectations for my career.	5.565	2.514	.420	2.213	.033
Constant	90.226	28.085		3.213	.003

Table 3

*Hierarchical Logistic Regression for Parent Education
Predicting Career Self-Efficacy*

Model		B	SE	β	t	Sig.
1	Constant	65.148	8.758		7.439	.000
	PCBC	.436	.105	.480	4.162	.000
2	Constant	66.989	9.566		7.003	.000
	PCBC	.437	.105	.481	4.144	.000
	Parent Education	-.815	1.644	-.058	-.496	.622

Note: Total R^2 for the model was .206. PCBC = Parent Career Behavior Checklist.