

WHEELER, MELISSA, Ph.D. Measuring the Effectiveness of “The Major Decision”: A Career Counseling Group for Undecided and Re-Deciding First Year, First-generation College Students. (2014)
Directed by Dr. L. DiAnne Borders, 322 pp.

Researchers have reported that the graduation and retention rate of students whose parents do not hold college degrees (first-generation college students or FGCS) are lower than that of their peers whose parents do hold college degrees. FGCS are 1.3 times more likely to leave college after their first year compared to their non-FGCS peers (Ishitani 2003; 2006). In their efforts to investigate ways to retain FGCS, researchers have given little attention to FGCS reported career intentions for college attendance (Bradbury & Mather, 2009; Byrd & MacDonald, 2005; Coffman, 2011; Martinez et al., 2009), even though a link has been established between career motives for college and increased GPA, adjustment to college, and increased college commitment for FGCS (Dennis et al., 2005). Social Cognitive Career Theory (Lent et al., 1994) may offer a plausible explanation for one reason why FGCS are not continuing their enrollment in college.

This study is a modification of the previous proposed career counseling group for undecided and re-deciding first year, first-generation college students. The current study was designed to utilize semi-structured interviews to explore the experiences and expectations of FGCS who were undecided or rethinking their college major through the lens of SCCT. Data gathered during this study were analyzed using the guidelines of Consensual Qualitative Research (CQR). The purpose of this study was to understand the experiences and expectations of these students while choosing to come to college, choosing a career, and the decision to become undecided or to re-think their college

major. It was found that student experience a range of personal and vicarious experiences, social persuasion, expectations, physical/emotional states, messages, and thoughts around the decision making process. The tenets of Social Cognitive Career theory were represented in the results of this study; however, some of the findings did not reflect tenets of SCCT. Results from this study add to the data concerning the types of experiences that influence FGCS decision making and goal achievement.

MEASURING THE EFFECTIVENESS OF “THE MAJOR DECISION”: A CAREER
COUNSELING GROUP FOR UNDECIDED AND RE-DECIDING FIRST
YEAR, FIRST-GENERATION COLLEGE STUDENTS

by

Melissa Wheeler

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro
2014

Approved by

Committee Chair

© 2014 Melissa Wheeler

Dedicated to my grandmother, Nancy D. Wheeler, and Ronald R. You both taught me the importance a college education can make and how much culture can change a person's perspectives, attitudes, and opportunities.

Ronald, I remember your lessons every moment I meet new students and I will never forget your dedication to education and community. You were the inspiration for this!

Nana, I will never forget your dream that all of your children and grandchildren would have the opportunity to attend college because you could not. The memory of holding your hand while you encouraged me to finish what I started has kept me present throughout this journey.

APPROVAL PAGE

This dissertation has been approved by the following committee members of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Committee Chair _____
L. DiAnne Borders

Committee Members _____
Laura Gonzalez

Christopher Poulos

Terry Ackerman

March 19, 2014
Date of Acceptance by Committee

March 19, 2014
Date of Final Examination

ACKNOWLEDGEMENTS

Dear God, thank you for all of the opportunities you have given me and thank you for the strength to make it. Thank you to the Avent and Griffin prayer circles.

Bill, Linda, Harold, and Wendy, thank you for your support in all forms during this journey. Mom and Dad, your love and understanding helped me become the independent person who was able to have the courage to help others- thank you.

Wayne, sorry for the late nights, demands of chocolate, and missed weekends but thank you for always being there when I needed you most.

Jessica and Blake, thanks for only calling me crazy once a year for doing this. Having you both around as siblings has made life easier.

Conquaya, thank you for showing me what a true career counseling professional can be. You are a true friend, mentor, and colleague. I am a better practitioner and researcher thanks to your guidance. I will never forget our laughs in your office.

My cohort, this last year apart has been so difficult. Thank you all for only being a phone call away. Your presence has meant more to me than you will ever know and I am happy to call you family. *Janeé and Myra*, thank you for being my qualitative mentors and my cheerleaders when everything feels like it is falling apart. *Ed*, thanks for being the big brother I always wanted. *Laura*, thanks for always talking with me on the drive home.

My committee, thank you for your support during phase I and phase II of this project. Dr. Borders, thank you for sticking with me, encouraging me, and checking in. Dr. Gonzalez, your mentorship has helped me as a professional and I have enjoyed our time discussing the joys of career counseling. Dr. Ackerman, thank you for getting me through statistics with a smile. Dr. Poulos, your classes were two of the most enjoyable courses during my graduate career. Thank you for introducing me to qualitative research and thank you for letting me learn about myself through autoethnography.

Spoma, you were the first person in my graduate career to tell me I was a good writer. That moment will stay with me and stuck with me every time I doubted myself during this process. Your belief in me as a researcher, teacher, and advocate was nothing more than life changing. Thank you for teaching me that research does not have to be boring and can involve your heart.

Melissa F. and Bethany, thank you for the long nights in the Vacc Clinic analyzing data, for answering my emails even when you were working on your own projects, and for just being awesome people. I am so glad to have met both of you!

The participants, thank you for the time you committed to this project and thank you for your support.

The National Career Development Association, thank you for your support of this dissertation.

My friends, thank you for putting up with me and my laptop during birthdays, vacations, Thanksgivings, and baby showers. I promise to leave it at home from now on.

TABLE OF CONTENTS

	Page
LIST OF TABLES	xii
LIST OF FIGURES	xiii
CHAPTER	
I. INTRODUCTION	1
Introduction	1
First-Generation College Students (FGCS).....	2
Social Cognitive Career Theory and First-Generation College Students.....	3
Purpose of the Study.....	5
Statement of the Problem	6
Need for Study.....	7
Definition of Terms	8
Summary of Remaining Chapters	9
II. REVIEW OF THE LITERATURE	11
First-Generation College Students	11
Characteristics of FGCS.....	12
Experiences in College.....	18
Reasons for Attending College	21
Social Cognitive Career Theory	22
Self-Efficacy.....	26
Outcome Expectations.....	27
Goals.....	28
Research behind SCCT	29
SCCT and FGCS	31
Summary.....	33
III. METHODOLOGY	35
Research Questions and Hypotheses	36
Population and Recruitment	38
Instrumentation.....	39
Career Decision Self-Efficacy Short Form	40
Vocational Outcome Expectations-Revised.....	42
Commitment to Career Choices Scale	44

Demographics Questionnaire	47
Group Evaluation Questionnaire	48
Control Group Final Questionnaire	48
Procedures	49
Intervention	52
Data Analysis.....	54
Pilot Study	57
Purpose	57
Participants	58
Methods and Procedures	60
Data Analysis	60
Results	60
Commitment to Career Choices Scale	61
Career Decision Self-Efficacy	62
Vocational Outcome Expectations-Revised	63
Effectiveness of CED 210 activities	64
Pilot study procedures.....	66
Discussion	66
Summary	69
Addendum to Chapter 3 - Overview	69
CQR Research Questions	71
Participants	72
Recruitment Procedures	73
Description of Sample.....	75
Interview Questions.....	77
Consensual Qualitative Research	80
CQR Data Analysis	81
Research Team	82
Bracketing and Research Training	84
Rigor.....	85
Ethical Considerations.....	86
Data Coding.....	87
Domain.....	87
Core ideas.....	89
Cross analysis.....	89
Categories	90
Labels	91
Pilot Study	92
 IV. RESULTS	 94
Overview	94
Description of Sample	94

Summary of Findings	99
Domain, Core Ideas, and Categories	122
Personal Experiences.....	122
High school	123
Childhood.....	128
College	128
Vicarious Experiences.....	134
Reflections	134
Active comparisons.....	137
Social Persuasion.....	140
Advice	140
Encouragement	142
Discouragement	145
Physical/Emotional States	147
Outcome Expectations.....	150
Expectations about college	150
Career expectations.....	151
Expectations of major	153
Expectations of self.....	155
Expectations of decisions.....	155
Expectations of others.....	156
Messages	156
Work	157
Education	158
Collectivism.....	158
Gendered messages about work.....	159
Drive	159
Source of messages.....	159
College stigma against undecided.....	160
Decision Making Styles/Cognitions.....	160
Personal/relational.....	161
Educated/rational	163
Personality.....	164
Other decision making styles/cognitions	166
Values.....	167
Happiness in career.....	167
Helping.....	168
Financial/job stability.....	168
Variant life values	169
Self-Efficacy.....	169
High self-efficacy.....	170
Low self-efficacy	171
Uncertain self-efficacy.....	172

Reason for Participation	172
Commitment to Career Choices Scale	174
Summary.....	176
V. DISCUSSION.....	183
Overview of the Chapter	183
Overview of the Study.....	183
Discussion of Research Questions.....	187
Research Question 1	188
Personal experience	188
Vicarious experiences	191
Social persuasion	192
Physical/emotional states	195
Outcome expectations.....	195
Messages	197
Decision-making cognitions/styles	199
Values	201
Self-efficacy.....	202
Research Question 2.....	202
Personal experiences.....	203
Vicarious experiences	205
Social persuasion	205
Physical/emotional states	205
Outcome expectations.....	206
Messages	207
Decision-making cognitions/styles	207
Values	208
Self-efficacy.....	208
Discussion of Domains and Categories.....	209
Personal Experiences.....	210
Vicarious Experiences.....	215
Social Persuasion.....	217
Physical/Emotional States.....	220
Outcome Expectations.....	221
Messages	223
Decision Making Cognitions/Styles.....	224
Values.....	226
Self-Efficacy.....	226
SCCT and FGCS Experience and Expectations.....	228
Commitment to Career Choices Scale	229
Reasons for Participation	230
Limitations.....	231

Suggestions for Future Research and Implications for Counseling.....	232
Conclusion	234
REFERENCES	235
APPENDIX A. INITIAL STUDENT EMAIL	242
APPENDIX B. DEMOGRAPHICS QUESTIONNAIRE	243
APPENDIX C. TREATMENT GROUP FINAL QUESTIONNAIRE	245
APPENDIX D. CONTROL GROUP FINAL QUESTIONNAIRE	246
APPENDIX E. ASSESSMENT PACKET	247
APPENDIX F. “THE MAJOR DECISION” GROUP CURRICULUM.....	250
APPENDIX G. PILOT STUDY INFORMATION	298
APPENDIX H. RECRUITMENT EMAIL FOR PREVIOUSLY INTERESTED STUDENTS	304
APPENDIX I. EMAILED INFORMED CONSENT	306
APPENDIX J. COPY OF INTERVIEW QUESTIONS SENT TO PARTICIPANTS	308
APPENDIX K. CQR DEMOGRPAHIC QUESTIONNAIRE	309
APPENDIX L. INTERVIEW PROTOCOL WITH FOLLOW-UP QUESTIONS PRIOR TO PILOT STUDY	311
APPENDIX M. CQR RESEARCH TEAM TRAINING	313
APPENDIX N. RESEARCH TEAM BRACKETING.....	315
APPENDIX O. FINAL INTERVIEW PROTOCOL.....	317

LIST OF TABLES

	Page
Table 1. Demographics of Pilot Study Participants	59
Table 2. Descriptive Statistics and Reliability (Cronbach's Alpha) for VEC and TTF in Total Sample.....	61
Table 3. Descriptive Statistics and Reliability (Cronbach's Alpha) for CDSE.....	63
Table 4. Descriptive Statistics and Reliability (Cronbach's Alpha) for VOE-R.....	63
Table 5. CED 210 Topics/Activities Listed as Most Helpful by Frequency	65
Table 6. CED 210 Topics/Activities Listed as Least Helpful by Frequency.....	65
Table 7. Pre/Post Intervention Scores for Participant.....	70
Table 8. Participant Demographics.....	96
Table 9. Domains for FYFGCS CQR Study.....	100
Table 10. Results for Research Question One	102
Table 11. Results for Research Question Two.....	113
Table 12. Participant Reasons for Participation.....	173
Table 13. Descriptive Statistics and Reliability (Cronbach's Alpha) for VEC and TTF in Total Sample.....	175
Table 14. Categories and Subcategory Labels by Question	177
Table 15. Combined Category and Subcategory Labels for RQ1 and RQ2	180

LIST OF FIGURES

	Page
Figure 1. Depiction of Interest Formation Model of SCCT (Adapted from Lent et. al, 1994).....	24
Figure 2. Career Choice Model of SCCT (Adapted from Lent et al., 1994).....	25
Figure 3. Depiction of Task Performance Model of SCCT (Adapted from Lent et. al, 1994).....	26
Figure 4. Curriculum.....	53
Figure 5. Research Question One Variables and Analysis	54
Figure 6. Research Question Two Variables and Analysis.....	54
Figure 7. Research Question Three Variables and Analysis.....	55
Figure 8. Research Question Four Variables and Analysis	55
Figure 9. Research Question Five Variables and Analysis.....	56
Figure 10. Research Question Six Variables and Analysis.....	57

CHAPTER I

INTRODUCTION

Introduction

Recent educational initiatives across the country have been aimed at increasing access to higher education for students, particularly students whose parents do not hold college degrees. Researchers report that the graduation and retention rate of students whose parents do not hold college degrees are lower than that of their peers whose parents do hold college degrees. In the Higher Education Act, the US Department of Education (1964) defined first-generation college student (FGCS) status as an individual who neither parent completed a Bachelor's degree or, in the case of an individual residing primarily with and being supported by one parent, the one primary parent did not attain a Bachelor's degree. First-generation college students (FGCS) are 1.3 times more likely to leave college after their first year compared to their non-FGCS peers (Ishitani 2003; 2006). Initiatives to recruit FGCS have led to an increased number attending college, yet these students are still not being retained in college at the rate of their non-FGCS peers. If college recruitment efforts have targeted these students, why are a disproportionate number of these students not completing bachelor's degrees?

First-Generation College Students (FGCS)

Over the past ten years, researchers have begun to examine factors that may explain the attrition rate of FGCS. Researchers have examined the background characteristics of these students, their academic preparation, experiences while in college, and support systems. In fact, research has revealed that FGCS are less academically prepared than their peers (Pascarella, Pierson, Wolniak, & Terenzini, 2004), score lower on standardized test (Martinez, Sher, Krull, & Wood, 2009), have lower academic self-efficacy before entering college (Gibbons & Borders, 2010), perceive a lack of family support for their educational goals while in college (Wang & Castaneda-Sound, 2008), and show lower academic and social integration in college (Prospero & Vohra-Gupta, 2007). Additionally, FGCS have been shown to be more likely to work while attending college (Martinez et al., 2009; Pascarella et al., 2004), report financial issues and/or lack of financial support from parents (Bradbury & Mather, 2009; Martinez et al., 2009), have lower GPAs through the third year of college (Pascarella et al., 2004), have trouble balancing multiple identities (Brost & Payne, 2011; Coffman, 2011; Olenchak & Hébert, 2002; Owens, 2010; Stieha, 2010), and report they lack knowledge of the structure and function of colleges and the college curriculum (Brost & Payne, 2011; Byrd & MacDonald, 2005). All of these factors have been used in attempts to explain how FGCS differ from their peers and why they are retained in far fewer numbers.

One area that has been given little attention in the effort to retain FGCS is a key reason why these students attend college. In a research study examining FGCS, Bui

(2002) found that FGCS attend college to gain respect and status, bring honor to their families, and help their families financially. Other researchers have reported that FGCS attend college for increased career opportunities that would not be available to them without a degree (Byrd & MacDonald, 2005; Coffman, 2011; Martinez et al., 2007). In fact, career motives (goals) for college have been found to increase GPA and adjustment to college, and they show a tendency to increase college commitment for FGCS (Dennis, Phinney, & Chuateco, 2005). If FGCS come to college for these reasons, why are so many dropping out?

Social Cognitive Career Theory and First-Generation College Students

Social Cognitive Career Theory (SCCT, Lent, Brown, & Hackett, 1994) may offer a plausible explanation for one reason why FGCS are not continuing their enrollment in college. SCCT suggests that, for goals to be achieved, a combination of self-efficacy beliefs, outcome expectations, and interests are needed for goal formation and goal directed action. Sources of self-efficacy are mastery experiences, vicarious learning, social persuasion, and physical/emotional states (Bandura, 1986). By definition, FGCS students lack mastery and have fewer opportunities for vicarious learning experiences when choosing college majors and completing their degree since their parents did not attend college and cannot provide guidance. Parents may be unable to provide advice and support about navigating the college experience (Bryan & Simmons, 2009; Byrd & MacDonald, 2005; Longwell-Grice & Longwell-Grice, 2008). This lack of vicarious learning and mastery experiences could lead to lower self-efficacy

surrounding making major choices and career decisions. Previously, qualitative researchers have shown that FGCS report feeling guilty when they did not want to pursue the goals their parents had set for their college attendance. They also felt guilty pursuing their own goals and interests in college, as they realized their parents were sacrificing so much so they could attend college (Olenchak & Hébert, 2002). This negative emotional state could lead to lower self-efficacy for making career decisions.

SCCT also suggests that goals must be proximal and clearly defined, and that an individual must be committed to the goal to be able to attain it (Lent, et al. 1994). For freshmen FGCS, career and college graduation are goals that are in the distance and are often not clearly defined. The structure of the college curriculum and major courses are designed to give students a breadth of knowledge by taking general education courses before entering intensive major courses. This may be confusing to FGCS and cause frustration as students may not see the relevance of their first college courses (Brost & Payne, 2011; Olenchak & Hébert, 2002).

Since FGCS report attending college for their family and feel guilty pursuing their own goals, they may feel they have to choose a major and a career the moment they arrive at college to be able to demonstrate a sense of purpose for attending college while their families are back at home. They may experience intense feelings of guilt if undecided or re-deciding their major. They may also feel that they cannot be open to major or career exploration as they are here for their family (Olenchak & Hébert, 2002). This could lead FGCS to choose college majors and careers early and tend to stick with

the majors they choose even if they are not interested in them or do not demonstrate skill in the major. They could also foreclose early on major and career choice as they feel they have a goal for attendance although this relationship has yet to be researched. Also, given that FGCS may not have exposure to others who have successfully chosen majors and graduated from college, they may not have formed realistic vocational outcome expectations.

Based on the tenets of SCCT and research supporting this theory, FGCS could have lower self-efficacy for choosing majors/careers, lower self-confidence about choices, lower vocational outcome expectations, and a higher tendency to foreclose on career options. To date, no study focusing on career/major choice self-efficacy, outcome expectations, commitment, or tendency to foreclose early on career options for FGCS has been conducted. Furthermore, no researcher has explored whether these factors can be increased or influenced through career counseling interventions.

Purpose of the Study

Given that FGCS come to college with the purpose of increased career opportunities, the purpose of this study is to explore the effectiveness of a career counseling intervention targeting FGCS. The intervention is designed to help FGCS understand and navigate the college major choice process and explore possible college majors. Intervention activities are aimed at supplementing the learning experiences FGCS have before arriving at college and providing new learning experiences to build their self-efficacy and bridge the gap from high school to college. The results of this

study will build the foundation for the use of career counseling interventions in the retention effort of FGCS and will add to the existing intervention based studies using the tenets proposed in SCCT.

Statement of the Problem

Through this study, the use and effectiveness of SCCT based career explorations for FGCS will be explored. By providing students with learning experiences to build their understanding of the major and career choice process, this intervention will seek to increase FGCS' career decision making self-efficacy and outcome expectations, and decrease their tendency to foreclose early on career options.

Given the purposes of this intervention, the following research questions will be explored in this study:

Research Question 1: Do FGFYCS report significantly different pre-post assessment scores in the commitment to career choices vocational exploration and commitment and tendency to foreclose scales after participating in a career counseling group?

Research Question 2: Do FGFYCS report significant pre-post increases in career-decision self-efficacy after participating in a career counseling group?

Research Question 3: Do FGFYCS report significant pre-test to post-test increases in scores of vocational outcome expectations after participating in a career counseling group?

Research Question 4: Are there a significant difference mean differences between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in commitment to career choices vocational exploration and commitment and tendency to foreclose scales from pre-test to post-test scores?

Research Question 5: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in career decision self-efficacy scores?

Research Question 6: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in vocational outcome expectation scores?

Need for Study

FGCS have been a population of interest for researchers and college personnel for at least the past 20 years, but they are still dropping out in record numbers. Lack of a college education can lead to decreased career opportunities and decreased future income causing further stress for FGCS. Additionally, the negative emotions of guilt and isolation reported by FGCS can be maladaptive for mental health and lead to their college attrition. This study could help university personnel find a way to use their currently available resources (career counselors and career planning courses) to increase the retention rate of FGCS. It could also help advisors, faculty, and student affairs staff working with FGCS better understand the unique set of needs these students bring to

college, especially in relation to career development. The results of this study will provide career counselors with an empirically-based career intervention grounded in theory to use with FGCS and help career counselors pinpoint areas of difficulty in the career planning process for FGCS. Counselors in college counseling centers could be provided with possible sources of FGCS emotional or physical discomfort and provide these practitioners with another area to assess when counseling college students. Finally, this study will help counselor educators training future college counselors by through building awareness of another area of client diversity and special consideration.

Definition of Terms

First-Generation College Students (FGCS)- refers to students whose parents have not received a Bachelor's degree (Higher Education Act, 1965)

First-Year, First-Generation College Students (FYFGCS)- refers to first- generation college students in their first year of college.

Non First-Generation College Students- refers to students who have at least one parent who has earned a college degree.

Vocational Outcome Expectations- refers to the belief that valued career options will be attained when certain actions are taken. For the purposes of this study, this variable will be measured by the Vocational Outcome Expectations Scale-Revised (McWhirter, Rasheed, & Crothers, 2000).

Career Decision Self-Efficacy- refers to the belief that an individual can complete the tasks necessary to make career decisions, as measured by the Career Decision Self-Efficacy Scale-Short form developed by Betz, Klein, and Taylor (1996).

Vocational Exploration and Commitment- refers to an individual's level of certainty as well as self-confidence about career choices, a positive sense of vocational future, and an awareness of potential obstacles. For the purposes of this study, this variable will be measured by the Commitment to Career Choices Scale (Blustein, Ellis, and Devenis, 1989)

Tendency to Foreclose- refers to an individual's level of openness to the career exploration and commitment process. For the purposes of this study, this variable will be measured by the Commitment to Career Choices Scale (Blustein, Ellis, Devenis, 1989).

Summary of Remaining Chapters

This study is organized into five chapters. Chapter I provided an introduction to the needs of first-generation college students as well as Social Cognitive Career Theory and how this applies to first-generation college students. An overview of the need for and purpose of this study was also outlined. Chapter II contains a review of relevant literature related to first-generation college students, their unique needs as students, as well as social cognitive career theory (SCCT) and the use of this theory with FGCS and the college population. In addition, this chapter will cover research relevant to SCCT such as career-decision making self-efficacy, outcome expectations, and goal

commitment. Chapter III contains information concerning the design of this study, including research questions, hypotheses, sample population, assessment instruments utilized, group curriculum, methodology employed, and an explanation of the planned data analysis. Chapter IV will describe the results of this study obtained utilizing the data analysis outlined in Chapter III. Finally, Chapter V will summarize the results of this study and relevant findings. Implications for college counseling practitioners, career counselors, researchers and counselor educators also will be provided in this final chapter.

CHAPTER II

REVIEW OF THE LITERATURE

First-Generation College Students

First-Generation College Students (FGCS) have been of particular interest to researchers as they have been shown to enter college with backgrounds that are very distinct from their peers whose parents attended college. FGCS have been defined in a variety of ways by researchers, such as a student whose parents have received no formal education past high school (Pascarella, Pierson, Wolniak, & Terenzini 2004) or students whose parents have not completed a college degree program (Prospero & Vohra-Gupta, 2007). The definition used to guide the selection of studies to be included in this chapter was the more inclusive definition of FGCS status defined in the Higher Education Act by the US Department of Education (1964) as an individual who neither parent completed a Bachelor's degree or, in the case of an individual residing primarily with and being supported by one parent, the one primary parent did not attain a Bachelor's degree. To understand how to assist this population, researchers first must understand the background characteristics of this student population, their experiences in college as well as differences in their experiences compared to their peers, and their reasons for pursuing post-secondary education.

Characteristics of FGCS

Researchers who have studied FGCS have observed academic and background characteristics of FGCS entering and attending college that are significantly different from the academic and background characteristics of students whose parents did graduate from college. These differences have been connected to lower graduation rates/higher attrition rates/less college persistence. FGCS are more likely to come from families of lower socio-economic statuses than their non-FGCS peers (Bui, 2002; Choy, 2001; Mehta et al., 2011). FGCS enter college with lower standardized test scores (Bui, 2002; Choy, 2001; Martinez, Sher, Krull, & Wood, 2009) and have taken less advanced high school coursework (Choy, 2001). FGCS also have been shown to enter college with lower critical thinking and math/reading skills (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1995).

Once in college, FGCS have higher attrition rates than their peers (Ishitani 2003, 2006; Martinez et al., 2009) and are more likely to leave college after their first year (Choy, 2001; Ishitani, 2003). FGCS have been shown to have lower college GPAs than their non-FGCS peers (Mehta, Newbold, & O'Rourke 2011; Pascarella et al., 2004). While in school, FGCS work significantly more hours for pay than their non-FGCS peers (Choy, 2001; Martinez et al., 2009; Pascarella et al., 2004), another factor known to negatively affect college persistence.

Although these studies had findings similar to each other that help researchers and administrators understand the basic characteristics of the FGCS population, the studies

differed in that each researcher tried to provide more detailed information to aid in understanding the FGCS retention puzzle based on the picture provided by earlier researchers. Choy (2001) and Pascarella et al. (2004) both analyzed data gathered through large national studies to try to understand the experiences of FGCS. The research design and data sampling methods Choy employed did not allow for analysis of factors that could be salient for FGCS at specific time points. As the data were collected at the end of every year, it was impossible to determine what background factors of FGCS might be most influencing their decision to withdraw from school after each semester. Furthermore, Choy sought to understand how FGCS significantly differed from their peers but not how these factors might affect their attrition.

In order to understand the drop-out behavior of first-generation college students versus their peers, Ishitani (2003) tracked the semester progress of 1,747 students at a public Midwestern university for nine semesters. Ishitani was interested in determining the likelihood a student would be retained in school after controlling for the effects of gender, race, parent's education level, annual family income level, and/or high school GPA. First-generation status was the most salient factor contributing to students' potential to drop out across all years of college. FGCS were more likely to leave after the first year of college with a 71% higher risk of attrition; this was also the only year high school GPA was a factor in the attrition of FGCS, suggesting that differences in students' attrition based on previous high school GPA are not a factor after the first year. Income also played a role in retention, as students with family incomes less than \$25,000 were at

a 49% higher risk for leaving in the first year. Although Ishitani's study added to the knowledge of the longitudinal attrition behaviors of FGCS, the results had limited generalizability due to data having been gathered at one institution. Ishitani also did not consider the role that expectations, motivations, supports, and college experiences could have in the attrition behaviors of students.

In a study of data from the National Study of Student Learning, Pascarella et al. (2004) attempted to understand how cognitive development, academic motivation, interactions with peers, and extracurricular and volunteer activities could affect the retention behaviors of FGCS. FGCS in this study had lower grades through the third year of college even after controlling for precollege cognitive development, secondary school grades, and academic motivation. The college experience of FGCS were significantly different from their non-FGCS peers, as FGCS exhibited lower levels of non-course related interactions with peers and were less likely to live on campus. They were also significantly less involved in extracurricular activities, athletic participation, and volunteer work in the second year of college, but FGCS derived stronger positive benefits from involvement in extracurricular and non-course related interactions with peers when compared to their non-FGCS peers. Although this study hinted at the role social capital could play in the academic success and college adjustment of FGCS, Pascarella et al. (2004) did not investigate what variables of the college experience and student institutional adjustment interactions with faculty, staff, and peers could have on FGCS.

Ishitani (2006) continued earlier research on generational status variables to include students from public and private institutions in the United States who participated in the national Postsecondary Education Transcript Study ($N = 4,427$) to investigate how student background characteristics and expectations affected attrition and progress towards graduation. FGCS in this study were 1.3 times more likely to leave their colleges than were non-FGCS. Students who did not expect to graduate were 1.3 times more likely to leave in their first year, students unsure about expectations were 1.3 times more likely to leave in second semester, and students whose parents did not expect them to graduate were more likely to leave in the third year. Additionally, FGCS were 51% less likely to graduate from college in four years compared to their non-FGCS peers. Clearly, graduation expectations were a key factor in FGCS' retention. Unfortunately, due to the exploratory nature of the study using already obtained data from a national survey, Ishitani was not able to ask specific questions to explore the effect peers, family, and experiences in the college environment could have on the retention behaviors of FGCS. He also did not consider the factor college GPA may have on students' ability to enroll in college at any given time point.

Martinez et al. (2009) were interested in studying the effect college GPAs had on the attrition of FGCS as well as what background characteristics of the FGCS served as mediators and moderators of student attrition. In a study of 3,290 students in a large mid-western university, they found that the effect of having a low college GPA on student attrition was larger for FGCS compared to non-FGCS. To pay for college, FGCS were

less likely to be able to rely on money from family and therefore used more scholarships, grants, and loans to pay for college and worked a part-time (if not full-time) job while attending college. The more hours a FGCS worked, the more they were at risk of dropping out of college. Full-time work was a risk factor for these students' attrition while part-time work acted as a protective factor. All of these factors (scholarships, loans, job status, and college GPA) as well as ACT scores mediated the effect of parental status to attrition. The interaction between student GPA and parental education was used to predict student non-enrollment. Finally, FGCS were more likely to report going to college to increase career opportunities versus attending college to party or find a mate compared to their non-FGCS peers. This study added to college administrators' and researchers' understanding of what factors really do play a significant part in the attrition rate of FGCS, but did not include the investigation of coping mechanisms on attrition, given that FGCS have so many demands on their time. The researchers also did not investigate how a career focus on college attendance could change the way FGCS perceive college and the challenges they face while in college.

In a smaller study of 452 undergraduate students at a mid-sized southwestern state university, Mehta et al. (2011) studied the needs, attitudes, behaviors, and perceptions of FGCS versus non-FGCS. FGCS reported lower levels of social and on-campus involvement, similar to Pascarella et al. (2004), but researchers did not find the difference in reported contacts to be significant. FGCS did report working more hours than their peers but, unlike other results (Choy, 2001; Martinez et al., 2009; Pascarella et al., 2004),

this difference was not significant. FGCS in this study reported significantly higher levels of financial stress and felt like they had greater time and financial commitments than their peers. To cope with stress, FGCS were more likely to ask for time off work to cope with and mentally sort out issues versus asking for time off to attend social events or go to bars. Although this study can help college staff, faculty, and administrators understand more about the behaviors of FGCS, it did not highlight the reasons behind low college involvement or the motivations of FGCS. The researchers also did not cover the impact students' perception of their abilities to complete the tasks necessary to be successful in college or to graduate from college could have on FGCS retention.

Researchers in the studies above have helped college personnel understand quantitatively what may be the experience of FGCS but, due to the nature of their research designs, these studies were not able to capture the lived experience of FGCS while in college. Furthermore, the results from these studies did not address why FGCS were coming to college and how this might impact their decisions to continue to enroll in colleges. The feelings and self-reported cognitions of FGCS who were enrolled in college were not studied, nor were the reasons why these students were not involved more on their college campuses. In order to better understand the factors related to low FGCS retention, researchers need to hear FGCS' voices to gain insight on their perspectives, feelings, and cognitions during the first years of college and beyond. It is important to understand the motivational characteristics, self-beliefs, outcome

expectations, and learning experiences in order to better understand how to structure interventions to increase FGCS retention.

Experiences in College

Accordingly, qualitative researchers have attempted to capture the voices of FGCS to understand their lived experiences in college and how these experiences might affect their perceptions of college and their decision to remain enrolled. Even though these studies consisted of small student sample sizes (less than 10 in most studies), researchers have reported similar findings from students concerning their emotional experiences and perceptions while in college, and students have shared similar expectations for coming to college that also mirror quantitative studies on the college experience of FGCS. This common bond of feelings, perceptions, and expectations could be due to the fact that FGCS share the common experience of having parents who did not attain a college degree.

By definition, parents of FGCS have not attended institutes of higher education and lack “college knowledge.” Thus they may be unable to provide advice and support about navigating the college experience (Bryan & Simmons, 2009; Byrd & MacDonald, 2005; Longwell-Grice & Longwell-Grice, 2008), which in turn leaves FGCS lacking knowledge about college vocabulary and experiences. This lack of knowledge about the structure and function of college can lead to FGCS feelings of isolation/alienation, guilt, and confusion/misunderstanding around the college curriculum.

FGCS have reported feelings of isolation/alienation stemming from a variety of experiences while in college. In qualitative studies, FGCS have reported having trouble balancing the multiple identities of student, worker, and their roles with the family/friends they left behind (Brost & Payne, 2011; Coffman, 2011; Olenchak & Hébert, 2002; Owens, 2010; Stieha, 2010) as well as culture clashes between their family culture and the college culture (Bryan & Simmons, 2009; Coffman, 2011; Stieha, 2010). FGCS have reported feeling college faculty members were uncaring and unsupportive (Engle & O'Brien, 2011; Longwell-Grice & Longwell-Grice, 2008; Olenchak & Hébert, 2002). Work load meant some FGCS could not participate in extracurricular and non-academic peer interactions, further increasing feelings of isolation (Stuber, 2001).

Also in qualitative studies, FGCS have reported feelings of guilt surrounding attending college while their parents struggle at home, or guilt for choosing college activities over family (Bradbury & Mather, 2009; Hartig & Steigerwald, 2007; Olenchak & Hébert, 2002; Stieha, 2010). Olenchak and Hébert (2002) reported the experiences of two male FGCS who experienced feelings of guilt because they did not want to pursue the goals their parents had set for their college attendance. These two students also felt guilty pursuing their own goals and interests in college because their parents were sacrificing so much so they could attend college. In conversations with a female FGCS, Stieha (2010) reported similar findings of the student's feelings of guilt for building connections on campus while her family waited at home.

The pull of home and family can be challenging for FGCS to negotiate (Olenchak & Hébert, 2002; Stieha, 2010). Bradbury and Mather (2009) reported FGCS felt the need to live geographically close to their family, and Bryan and Simmons (2009) reported FGCS felt pressure to move back home regardless of the lack of professional opportunities at home after graduation. FGCS perceive a strong pull to home and feelings of guilt associated with this, so that they often are living at home or returning home on the weekends (Bradbury & Mather, 2009; Bryan & Simmons, 2009). They also experience culture clashes between their family culture and the college culture (Bryan et al., 2009; Coffman, 2011; Stieha, 2010).

FGCS have reported they lacked knowledge of the structure and function of colleges and the college curriculum (Brost & Payne, 2011; Byrd & MacDonald, 2005). FGCS lacked the vocabulary of college that many of their peers grow up with (Byrd & MacDonald, 2005), as specialized terms (like credit hour) are foreign to them. FGCS felt their expectations of the ideal major were not met as the curriculum of their chosen major did not match their visions (Brost & Payne, 2011). FGCS also have reported feeling like their major curriculum was too tight and did not allow for self-exploration (Olenchak & Hébert, 2002). FGCS saw faculty and advisors as barriers to their achievement and had trouble adjusting to the differing expectations of professors (Bradbury et al., 2009; Engle, Bermeo, & O'Brien, 2006; Longwell-Grice & Longwell-Grice, 2008), not only emphasizing a misunderstanding about the function of professors in the college system but also adding to feelings of isolation. All of the reported experiences of FGCS while

attending college could lead to negative emotional states that could affect the quality of their learning experiences and engagement in college. The feelings of guilt and isolation could affect FGCS' self-efficacy for successfully completing college.

Reasons for Attending College

FGCS are more likely to report attending college for increased career opportunities (Bradbury & Mather, 2009; Byrd & MacDonald, 2005; Coffman, 2011; Martinez et al., 2009). Quantitative studies of entering FGCS have also supported the finding from the qualitative studies, suggesting the concerns of FGCS and their reasons for entering college. In a study of 64 FGCS, Bui (2002) found that FGCS ranked gaining respect/status, bringing honor to their family, and helping their family out financially as reasons for attending college. FGCS in Bui's study ranked these reasons for attending college significantly higher than did their non-FGCS peers. FGCS in this study felt less prepared to go to college, feared failing in college, and reported knowing less about the college environment. While studying a sample of 100 ethnic minority FGCS, Dennis, Phinney, and Chuateco (2005) observed that career/personal motivations predicted college adjustment even with high school GPA and other confounding variables controlled. FGCS motivations to attend college based on personal interest, intellectual curiosity, and the desire to attain a rewarding career were found to be predictive of college adjustment. Researchers also observed a trend that career/personal motivation to attend college predicted college commitment when controlling for other variables.

These statistics can tell us a great deal about what sets FGCS apart academically and in their lived college experiences, but they do not tell us the story of how to target intervention strategies effectively to help FGCS remain in college. It would appear that, in order to understand how to increase FGCS commitment to college and their retention rate in college, researchers should explore students' reasons for attending college. Studies by Bradbury and Mather (2009), Bui (2002), Byrd and MacDonald (2005), Dennis et al (2005), and Martinez et al. (2009) all point to FGCS motivations for attending college as career related, usually to improve the career opportunities available to them. Currently, however, there are no studies of interventions targeted at addressing the career specific reasons why FGCS are pursuing higher education and working to increase students' understanding of how college can help with these plans. Furthermore, research studies on career interventions for FGCS would need to be grounded in a proven career theory, one that takes into account the specific background characteristics of FGCS.

Social Cognitive Career Theory

Social Cognitive Career Theory is a very useful theory not only for conceptualizing FGCS career choice and development, but for also explaining FGCS behaviors and experiences in college. SCCT accounts for factors such as the influence of family and peers on the self-efficacy, interests, and goals of FGCS. SCCT describes the cognitive behaviors and learning processes that help a person develop career interests, career choice, and performance goals. According to the tenets of SCCT, career and

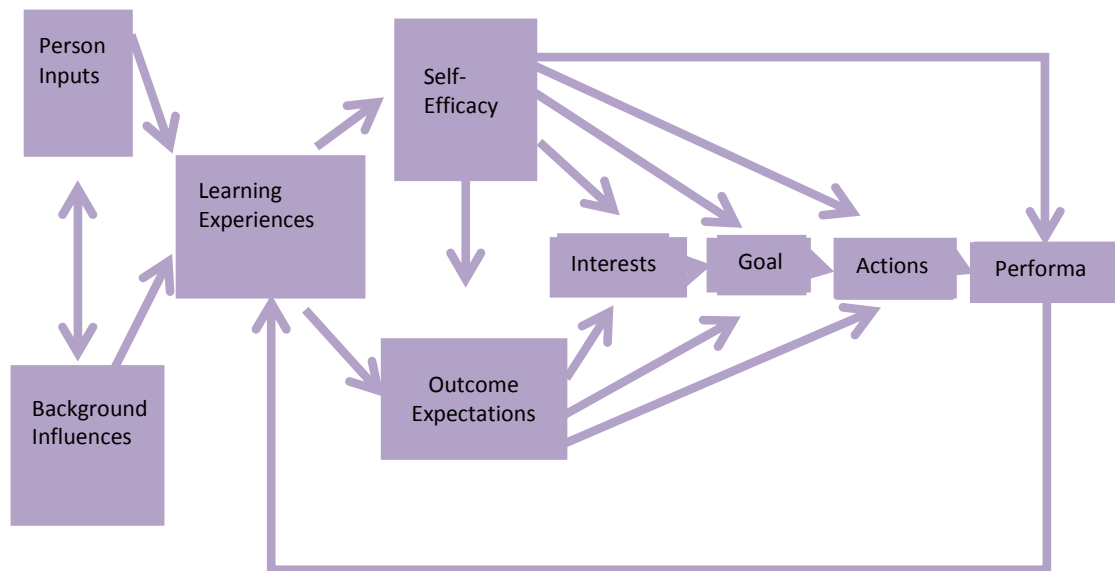
academic development happens in three models of development: interest formation, career choice, and task performance. These models are designed to be sequential: once one model is complete, individuals move to the next stage in the development framework. Each stage of the model takes into account the three main driving forces behind SCCT of self-efficacy, outcome expectations, and goals (Lent, Brown, & Hackett, 1994).

In the interest formation model, an individual's person characteristics (i.e., race, age, and gender) combine with the individual's background influences (i.e., socio-economic status, past experiences, career role models, peer influence, parental behaviors, and supports/discouragements) to influence the individual's learning experiences (see Figure 1). Learning experiences are activities individuals are exposed to that either allow them to personally complete a task or to watch someone else complete a task and the accompanying emotions and verbal affirmations that affect how individuals perceive future decisions attempt the task. Learning experiences can then affect an individual's self-efficacy and outcome expectations. Self-efficacy beliefs are defined as the beliefs individuals hold in their ability to complete a given task and outcome expectations are what an individual expects to happen when attempting to complete a given task. An individual can have high self-efficacy in their ability to complete a task, but also hold low outcome expectations regarding what will happen once the task is completed. Self-efficacy and outcome expectations then have an influence on choice processes as

individuals may choose whether or not to pursue certain goals based on their self-efficacy and outcome expectations (Lent, Brown, & Hackett, 1994).

Figure 1. Depiction of Interest Formation Model of SCCT

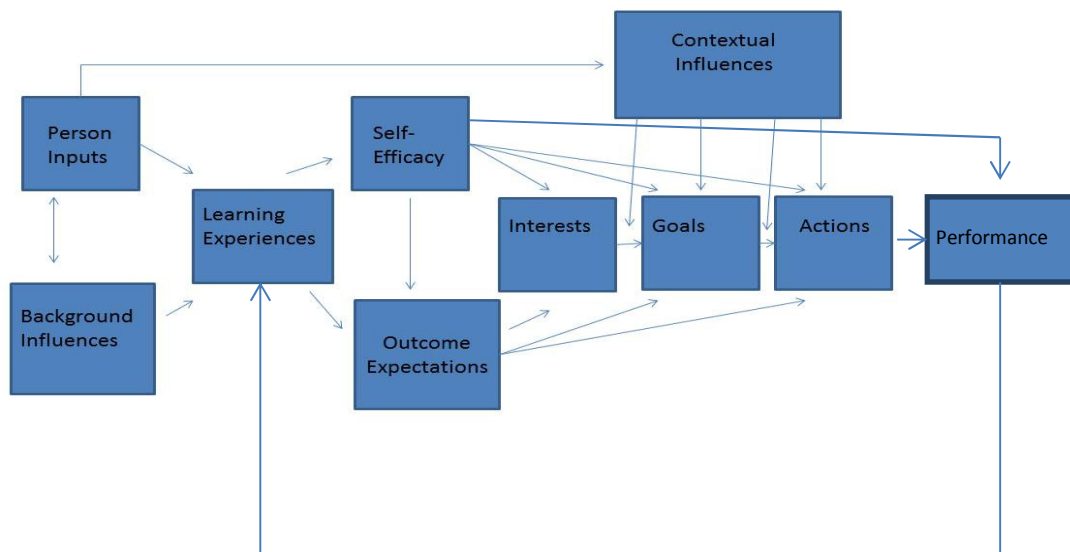
(Adapted from Lent et. al, 1994)



In the second model of career choice, both self-efficacy and outcome expectations affect the career interests of the individual, which in turn affect the goals they set and their actions toward those goals (see Figure 2). Goals, self-efficacy, and outcome expectations can all be influenced by performance on the way to attaining goals or perceived barriers or supports present when forming and planning for goals (Lent, et al. 1994). In this way, performance then becomes a learning experience in a feedback loop that in turn affects self-efficacy. At the point of interests developing into career goals and goals developing into action behavior, an individual's proximal contextual influences

(supports or barriers close to the choice process, such as discrimination in the world of work, networks, and supports/barriers in the pursuit of goals) can affect the chosen interests and behaviors to change a student's goals, interests, and/or actions (Lent, Brown, & Hackett, 2000).

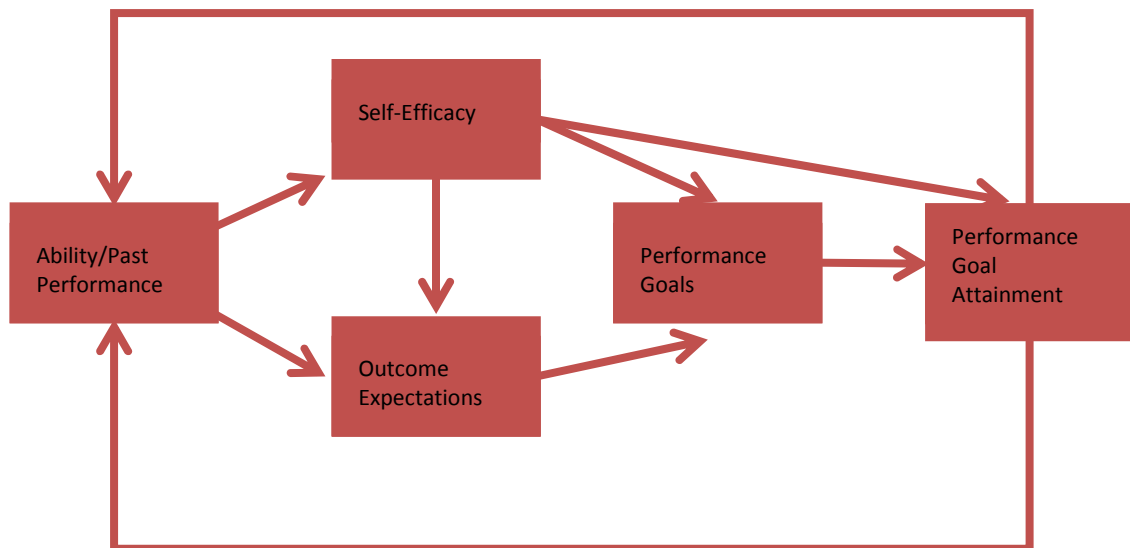
Figure 2. Career Choice Model of SCCT (Adapted from Lent et al., 1994)



The final model of task performance in SCCT suggests that an individual's academic and career performance and persistence is related to their perceived self-efficacy and outcome expectations for the task and their expectations of possible outcomes when they attempt the task (see Figure 3). An individual's perceived ability to complete a task/goal set directly affects their performance on the way to goal attainment (Lent, Brown, & Hackett, 1994). This model highlights the importance of self-efficacy

and outcome expectations as not only influences on goal formation, but also as a driving motivational influence behind goal performance.

Figure 3. Depiction of Task Performance Model of SCCT (Adapted from Lent et. al, 1994)



Self-Efficacy

Bandura (1986) defined self-efficacy as “people’s judgments of their capacities to organize and execute courses of action required to attain designated types of performance” (p. 391). Bandura (1997) considered self-efficacy to be the foundation of human agency. In terms of the career decision process, self-efficacy functions to influence an individual’s outcome expectations, interests, goal formation, and performance towards goal achievement (Lent, Brown, & Hackett, 1994). Self-efficacy is

task specific, meaning an individual can have high self-efficacy in making good grades in math but low self-efficacy in completing a major in math.

Self-efficacy is built and influenced through learning experiences. Sources of influence on self-efficacy are performance attainments (mastery experiences), vicarious learning, social persuasion, and physical/emotional states (Bandura, 1986). Performance attainments, also referred to as mastery experiences, are opportunities for an individual to perform a given task and be successful completing the task. Individuals also gain self-efficacy through watching others, who they perceive as being similar in ability, successfully complete tasks. This observational learning is also known as vicarious learning. Social persuasion is verbal persuasion used to convince an individual that he/she is capable of performing a given task. Finally, the somatic and emotional experiences of an individual while performing a task sends messages regarding the individual's ability to complete the task. These sources of self-efficacy represent powerful points of intervention for counselors or other practitioners. Sources of self-efficacy for task completion can also directly and indirectly affect how an individual perceives the consequences of performing the task in question.

Outcome Expectations

Bandura (1986) defined outcome expectations as an individual's imagined consequences of performing an action. Related to SCCT, a career or vocational outcome expectation is an individual's perceived outcome when choosing to pursue a career or actions toward a particular career (Lent et al., 1994). Sources of self-efficacy also

influence outcome expectations and can lead to an individual's decision to pursue or abstain from certain career choices or goal directed action. Lent et al. proposed that career outcome expectations have a direct connection to an individual's career interests and career goals. Outcome expectations can also affect an individual's actions towards their goals. Lent et al. proposed that individuals will avoid forming interest in careers if they which they perceive the rewards to be low or non-existent. Furthermore, if individuals do not perceive benefits to pursuing a chosen career, they will not pursue actions toward those careers.

Goals

SCCT theorizes that an individual's self-efficacy and outcome expectations for a chosen career will combine to influence their interest in a chosen career. Once the interest is established, an individual will then form a goal around that interest. Goals are an implied function of career choice; career decisions and career planning can be viewed as steps tied to completing goals (Lent et al., 1994).

In order for an individual to have success in completing a goal, researchers have found that certain factors must be present (Locke & Latham, 1990). According to Locke and Latham (1990), goals must be clear and specific as well as involve an individual's commitment to the goal in order for goals to be achieved. Bandura (1986) stated goals must also be close to the point of action and attainment in order to be achievable. If these factors are present, individuals will have a higher likelihood of completing their goals as they will have a higher likelihood of being committed to their goals. Goal commitment

provides motivation for individuals to begin completing actions to attain their goals (Lent et al., 1994).

Research behind SCCT

Components of SCCT have been tested with adolescent and college student populations of varying backgrounds to further support the validity of the pathways Lent et al. (1994) proposed. Self-efficacy for mathematics and science have been linked to students' interest in pursuing majors in these fields (Lent, Brown, Brenner, Chopra, David, Talleyrand, & Suthakaran, 2001; Lent, Brown, & Larkin, 1987; Lent, Brown, Schmidt, Brenner, Lyons, Triestman, 2003). Lent et al. (2001) found that interest, self-efficacy, and outcome expectations correlated not only with major choice, but also with student intentions to enroll in a chosen major. Lent et al. (1987) found, in a sample of college students, that self-efficacy for technical/scientific majors was the most significant predictor of student persistence in those majors.

Since self-efficacy is task specific and SCCT focuses on an individual's ability to choose and pursue careers of interest successfully, researchers have shifted their focus to individuals' beliefs surrounding their ability to accomplish the tasks necessary to make decisions regarding career options. These beliefs, known as career decision making self-efficacy or career decision self-efficacy (CDSE), have been linked to college student major and career indecision and have been shown to be a significant predictor of career indecision (Betz & Voyten, 1997; Taylor & Betz, 1983). CDSE has been shown to predict academic and social integration of underprepared college students; increased

integration has been shown to positively affect student persistence (Peterson, 1993). Increased levels of CDSE have been linked with increased levels of career identity and exploration in students, meaning the more self-efficacy individuals have in their ability to search for careers and make decisions, the more exploratory behaviors they will have exhibited and the more committed they will be (Stringer & Kerpelman, 2010).

Research on outcome expectations has further solidified their link to self-efficacy, but also their influence on goal formation and goal related actions. Outcome expectations have been found to be predictive of intentions to explore careers (Betz & Vuyten, 1997) and increased pursuit of those intentions (Diegelman & Subich, 2001). Much of the research conducted on vocational outcome expectations has been conducted using high school student samples; therefore research specifically investigating their effects on college students is limited. Vocational outcome expectations have been shown to be predicted by self-efficacy (Ali, McWhirter, & Chronister, 2005) and to increase with positive verbal persuasion interventions (Diegelman & Subich, 2001; McWhirter, Rasheed, & Crothers, 2000).

In SCCT, career goals are not just wishful dreams and aspirations; goals require action, motivation, and commitment. Researchers studying goal commitment have found that commitment to difficult goals is increased when the goal is made public, when individuals feel they can control the outcome of their goal, and when goals are self-created (Hollenbeck, Williams, & Klein, 1989). Increased career goal commitment is also related to career exploration in that individuals who had recently completed career

exploration activities were more likely to express commitment to their goals (Blustein, Ellis, & Devenis, 1989). These studies highlight the importance of self-set goals and career exploration processes in the goal commitment process.

SCCT and FGCS

Given the importance of self-efficacy, outcome expectations, and goal commitment in career development and attainment, it is important for researchers to understand how these tenets of SCCT function in career development, especially for populations such as FGCS whose main goal in college is career related but who have been shown on average not to complete these goals, as demonstrated by their college retention rates.

Since their parents did not graduate from college, FGCS students frequently lack mastery and vicarious learning experiences when choosing college majors and completing their degree. As discussed, FGCS have reported feeling the negative emotional state of guilt when they did not want to pursue the goals their parents had set for their college attendance, as they felt their parents were sacrificing so much so they could attend college (Olenchak & Hébert, 2002). Social persuasion is also different for FGCS, as they report feeling pulled between family, peer, and college cultures and may get the message college attendance is not as valued in their family or peer group (Bryan et al., 2009; Coffman, 2011; Stieha, 2010). The lack of vicarious and mastery experiences as well as different roles of social persuasion and the negative emotional

state of guilt could lead to lower self-efficacy surrounding making major choices and career decisions.

SCCT also suggests that goals must be set close to the point they are to be achieved, be clearly defined, and that an individual must be committed to the goal to be able to attain it (Lent, et al. 1994). For a first year FGCS, career and college graduation are goals that are in the distance and are often not clearly defined. The structure of the college curriculum and major courses are designed to give students a breadth of knowledge by taking general education courses before entering intensive major courses. This may be confusing to FGCS and cause frustration as students may not see the relevance of their first college courses (Brost & Payne, 2011; Olenchak & Hébert, 2002).

FGCS have stated in prior research that their goals for attending college are career/job related (Bradbury & Mather, 2009; Bui, 2002; Byrd & MacDonald, 2005; Dennis et al., 2005; Martinez et al., 2009). For a first-year student, the goals of graduation and a successful career are at least four years away; FGCS are already at a disadvantage for meeting the theorized criteria for attainable goals. The goal performance/attainment criteria and pathway proposed by SCCT may help researchers understand how to target interventions for FGCS, specifically in the first year of college when FGCS have been shown to have a higher probability of leaving college given their true goal for college attendance is too far in the distance.

Summary

Since FGCS report attending college for their family and feel guilty pursuing their own goals, they may feel they have to choose a major and a career the moment they arrive at college to be able to demonstrate a sense of purpose for attending college while their families are back at home. They may experience intense feelings of guilt if undecided or re-deciding their major. They may also feel that they cannot be open to major or career exploration as they are at college for their family (Olenchak & Hebert, 2002). This could lead FGCS to choose college majors and careers early and tend to stick with the majors they choose even if they are not interested in them or do not demonstrate skill in the major. They could also foreclose early on major and career choice as they feel they have a goal for attendance. Also, given that FGCS may not have exposure to others who have successfully chosen majors and graduated from college, they may not have formed realistic vocational outcome expectations.

Based on the tenets of SCCT and research supporting this theory, FGCS could have a restricted set of learning experiences that could translate to lower self-efficacy for choosing majors/careers, lower self-confidence about choices, lower vocational outcome expectations, and a higher tendency to foreclose on career options. To date, no study focusing on career/major choice self-efficacy, outcome expectations, commitment, or tendency to foreclose early on career options for FGCS has been conducted. Furthermore, no study has explored whether these factors can be increased or influenced through career counseling interventions. Thus, the current study will contribute to the

field of counseling by testing a counseling intervention designed to provide FGCS with the learning experiences they may have missed prior to their arrival at college. Furthermore, this study will assess the effects of this intervention on FGCS career/major choice self-efficacy, outcome expectations, commitment, and tendency to foreclose on career options. Finally, this study will assess participants' perceived effectiveness of the interventions aimed at assisting in their career development.

CHAPTER III

METHODOLOGY

As outlined in the review of literature in Chapter Two, research on first-generation college students is lacking a study of the career development needs of these students as well as solid research studies on interventions related to FGCS outcomes while in college. Many researchers have focused on the demographics of these students, their background characteristics, their lived experiences in college, and their academic characteristics; however, there is a gap related to self-efficacy beliefs and outcome expectations of FGCS when choosing a major or career in college and the role of their career goals/commitment in college commitment and persistence. Furthermore, current research lacks a proven intervention to supplement the learning experiences FGCS may not have had exposure to prior to their arrival at college. The next steps of research suggest a need for career counseling interventions related to the career-related goals FGCS have when coming to college and that provide them with the learning experiences necessary to increase career decision self-efficacy and vocational outcome expectations needed commit to these goals. This chapter contains information regarding the research questions and hypothesis, participants, instruments used, methodology, and data analysis employed in this study.

Research Questions and Hypotheses

Research Question 1: Do FGFYCS report significantly different pre-post assessment scores in the commitment to career choices vocational exploration and commitment and tendency to foreclose scales after participating in a career counseling group?

Hypothesis 1a: FGFYCS will report significant decreases in mean scores of tendency to foreclose from pre-test to post-test after participating in a career counseling group.

Hypothesis 1b: FGFYCS will report significant increases in mean scores of vocational exploration and commitment from pre-test to post-test after participating in a career counseling group.

Research Question 2: Do FGFYCS report significant pre-post increases in career-decision self-efficacy after participating in a career counseling group?

Hypothesis 2: FGFYCS will report significant mean increases in career-decision self-efficacy scores from pre-test to post-test after participating in a career counseling group.

Research Question 3: Do FGFYCS report significant pre-test to post-test increases in scores of vocational outcome expectations after participating in a career counseling group?

Hypothesis 3: FGFYCS will report significant mean increases from pre-test to post-test scores of vocational outcome expectations after participating in a career counseling group.

Research Question 4: Are there significant mean differences between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in commitment to career choices vocational exploration and commitment and tendency to foreclose scales from pre-test to post-test scores?

Hypothesis 4a: FGFYCS who participate in a career counseling group will report significant mean decreases in commitment to career choices tendency to foreclose compared to FGCS in a control group.

Hypothesis 4b: FGFYCS who participate in a career counseling group will report significant mean increases in commitment to career choices vocational exploration and commitment compared to FGCS in a control group.

Research Question 5: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in career decision self-efficacy scores?

Hypothesis 5: FGFYCS who participate in a career counseling group will report significant mean increases in career decision self-efficacy compared to FGCS in a control group.

Research Question 6: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in vocational outcome expectation scores?

Hypothesis 6: FGFYCS who participate in a career counseling group will report significant mean increases in vocational outcome expectations compared to FGCS in a control group.

Population and Recruitment

First-year, first-generation college students who are undecided or re-deciding their majors will be recruited to participate in this study. The definition of FGCS used for this study will be the definition used by the U.S. Department of Education who define FGCS as students whose parents have not attained a Bachelor's degree. It is important that only first-year students be recruited as researchers have found that it is during the first year of college that FGCS are most likely to leave college and these students likely have not had the opportunities to participate in career-related learning experiences in college that would increase their scores on the constructs chosen for the study. Likewise, students cannot be participating in or have participated in programs that provide career-related activities, counseling covering major or career exploration, or mentorship that could confound the results of this study, such as enrolling in CED 210.

Volunteers for this study will be recruited using campus listserv emails, emails and presentations to academic advisors to discuss promotion of the group to students, Career Services emails and presentations to staff, and promotion by Peer Career Advisors during walk-ins appointments at Career Services. Since the sample will consist of volunteers, it will be non-random. Only students who identify as first year, first-generation college students who have not participated in career counseling covering the

topics addressed in the intervention study or are not enrolled/have completed CED 210 will be chosen to participate in the study. Once the researcher has received the critical number of participants, volunteers will be assigned into treatment and control groups.

The sample will be randomly assigned into treatment and control groups. A G*Power analysis revealed a minimum of 21 participants will be needed to run the paired *t*-tests with a power of .8 and an effect size of .5 for the first three research questions; the repeated measures MANOVA with an effect size of .5 will require a minimum of 20 participants per group. Due to the exploratory nature of this study, smaller numbers of participants will be recruited than what is required to have adequate statistical power. Ideally, a minimum of eight and a maximum of ten students will be recruited for each group with the same number of participants in both the treatment and control groups; however, it may be more advantageous to assign more students to the control group to account for potential drop outs.

Instrumentation

Participants will be asked to complete the instruments in the following order: demographics questionnaire, Career Decision Self-Efficacy Short Form, Vocational Outcome Expectations-Revised, and the Commitment to Career Choices Scale. Bandura (1986) theorized that emotional states are learning experiences that affect self-efficacy. It was important to place the CDSE first to accurately gather this information before students were exposed to expectations and commitment items that might place students in an emotional space. Several of the items on the Commitment to Career Choices Scale are

constructed as negative thoughts; therefore it was important to order the instruments so students were exposed to these items last.

Career Decision Self-Efficacy Short Form

The Career Decision Self-Efficacy Short Form (CDSE-SF; Taylor & Betz, 1983; Appendix E) was developed to assess individuals' beliefs that they could perform certain tasks central to making career decisions. The tasks selected to study were based on Crites's five Career Choice Competencies and the authors developed items according to behaviors they believed were related to each competency (Taylor & Betz, 1983). The original CDSE was designed with 50 total items, 10 items per choice competency (Taylor & Betz, 1983). The choice competencies compose the subscales of the CDSE: Self-Appraisal, Occupational information, Goal Selection, Planning and Problem Solving. The CDSE was developed for use with college students who rate behavior statements on a 10 point Likert-type scale based on their confidence they could complete the behavior (0 = no confidence, 9 = complete confidence). Scores are tabulated by summing all numbers for a total score (450 or less). Lower self-efficacy scores indicate greater perceived task difficulty.

The scale was originally tested on a sample of college students ($n = 346$) from a large mid-western university and a private college (Taylor & Betz, 1983). Participants included 128 males and 219 females with an average age of 19.1. Class level breakdown for the initial participants included 79% freshmen, 16% sophomores, and 5% juniors/seniors. Coefficient alpha for the total scale score was .97 and for the subscales

ranged from .86 (Problem Solving) to .89 (Occupational Information and Planning). The scale was also found to be negatively correlated with the Career Decision Scale, indicating the more an individual lacks confidence in the tasks presented, the more indecisive they are. Regression with career indecision scales and SAT scores indicated the CDSE scores predicted career indecision more than SAT scores. Factor analysis revealed five factors; however, several items loaded on more than one factor.

A short form of the CDSE scale was developed to address the factor loading issues of the original CDSE as well as to provide researchers and practitioners with a form that was more easily administrable as a pre-post test assessment of counseling interventions (Betz, Klein, & Taylor, 1996). The CDSE Short Form still utilized a 10-point, Likert-type scale; however, factor analysis was used to condense the 50 scale items to 25. The shorter scale was tested on a population ($n = 184$) of students in an introduction to psychology course at a large mid-western university that consisted of 81 male and 103 female participants. Coefficient alpha for the total scale was .94 with a range of .73-.94 for the subscales. Concurrent validity for the short form was established with significant correlations with the Vocational Identity subscale of My Vocational Situation and the Career Decision Scale.

Betz, Hammond, and Multon (2005) reported on the reliability and validity of a five-point Likert-type scale response Career Decision Self-Efficacy Scale as well as a test of possible differences in ethnic groups on scale responses. Using three samples ($n = 627, 405, 400$) consisting of mostly first year students from a mid-western state

university and a small, private university, the reliability and validity of the five-point scale was compared to that of the 10- point response scale; total score coefficient alphas for the five-point response short form ranged from .93 to .95 and subscale scores ranged from .78-.87 compared to subscale ranges from .69-.83 for the 10-point response scale. Construct validity was established with the Goal Instability Scale and a positive/moderate correlation of .52 with total CDSE scores was found. This indicated higher self-efficacy was associated with more stable goals.

This study will utilize the short form of the Career Decision Self-Efficacy scale. Participants complete 25 total items by rating their confidence using a five-point Likert-type response in completing a task presented. Items include prompts such as “choose a career that will fit your preferred lifestyle,” “talk with a person already employed in a field you are interested in,” and “make a career decision and then not worry whether it was right or wrong.” Total scores will be utilized, higher scores translating to greater levels of career decision self-efficacy. No differences in scores by gender or ethnicity have been found, and no effect for year in school has been reported.

Vocational Outcome Expectations-Revised

The Vocational Outcome Expectations-Revised scale (VOE-R; McWhirter & Metheny, 2009; Appendix E) was designed to assess imagined or expected consequences of pursuing a chosen career. The original scale was composed of six statements on a four-point, Likert type scale. A scale score was obtained by averaging a participant’s responses. With a sample of high school sophomores ($n = 110$) a coefficient alpha of .83

was observed with concurrent validity established with another well used measure of outcome expectations. Nine week test-retest reliability was measured at $r = .59$. Since the development of the scale, vocational outcome expectations have been studied with other high school populations ($n = 325$, mean age = 17.5), with an internal consistency alpha of .90 (Metheny, McWhirter, & O'Neil, 2008), and with adolescents of lower socioeconomic status from a semi-rural, Northwestern high school ($n = 114$, mean age = 14.7), with an observed alpha of .92 (Ali, McWhirter, & Chronister, 2005).

Metheny and McWhirter (in press) have tested an expanded and revised version of the VOE with students ($n = 279$, mean age = 19.5) from two and four year colleges. The VOE-R contains six additional items developed to reflect Bandura's three types of outcome expectations. Exploratory factor analysis on the revised measure revealed one factor. Coefficient alpha for the measure was observed at .92 with an inter-item variance correlation of .008.

The VOE-R will be used in this study as it has been tested with college students and found to be reliable (coefficient alpha .92). Participants will be asked to respond to 12 items on a four-point, Likert type scale (1 = strongly disagree; 4 = strongly agree). Item types include prompts such as "I will be successful in my chosen career/occupation" and "My talents and skills will be used in my career/occupation." Higher scores are interpreted as participants having more positive outcome expectations.

Commitment to Career Choices Scale

The Commitment to Career Choices Scale (CCCS; Blustein, Ellis, Devenis, 1989; Appendix E) was developed to assess an individual's career choice certainty and self-confidence about options, a positive sense of career future, and awareness of obstacles. The measure consists of two scales representing independent dimensions of the choice and commitment process: Vocational Exploration and Commitment (VEC) - self-confidence about choice, positive sense of future and awareness of barriers, and Tendency to Foreclose (TTF) - openness to the commitment process. Items for the scale were developed using an unpublished exploration and commitment scale as well as reviews of relevant career literature.

The CCCS underwent extensive reliability and validity testing in its development. In an initial pilot study of undergraduates at a northeastern university ($n = 203$), the original scale utilizing a five-point Likert-type scale was found to have poor reliability and moderate factor loadings when confirmatory factor analysis was performed. Problematic items were rewritten, the total number of items was increased, and a seven-point Likert type scale was utilized to create a new CCCS measure. Fifty experts were asked to review items for content validity by coding items to see which scale each item represented.

The new measure was tested on a derivation sample ($n = 565$) and a cross-validation sample ($n = 571$) of master's and undergraduate students; the specificity level (SL) of the Career Pattern Study, Vocational Decision Scale (VDS), and the Social

Desirability scale (SDS) were used to establish content and construct validity. The VEC subscale of the CCCS correlated significantly with SDS; TTF and SL correlated negatively. Pilot study coefficient alphas were observed at .82 and .78 for the TTF subscale as well as .92 and .91 for the VEC subscale. No significant differences were found by gender. A sample of 137 participants was selected for test/retest reliability. Internal consistency alphas observed for this sample were .83 TTF and .91 VEC; after two weeks, researchers observed test-retest reliability coefficients of $r = .82$ for the TTF subscale, $r = .90$ for the VEC, and, after four weeks $r = .84$ for the TTF and $r = .92$ for the VEC. Confirmatory factor analysis was run to determine items to take out based on factor validity, extent of social desirability bias, relation to VDS and SL, and the expert ratings obtained previously. The resulting measure consists of 28 items.

Two construct validation studies were conducted to determine the validity of the final measure. The first study ($n = 117$, mean age = 19.75) was composed of college students, who were predominantly Caucasian (75.9%), 51.7% male, 30.8% freshmen, 28.2% sophomores, 23.1% juniors, 15.4 seniors, 2.6 grad students). The TTF subscale was associated with measures of personality and development, particularly the moratorium and identity achieved statuses from the Extended Objective Measure of Ego Identity Status, and the foreclosure ego identity status. The VEC subscale was found to be related to other measures of career development.

In the second study, the use of the CCCS to evaluate a classroom based intervention for college students ($n = 303$, mean age = 20.01) was investigated. The

treatment group participated in a fifteen week, three credit undergraduate, career and life planning course ($n = 84$); the comparison group completed an academic and personal effectiveness course ($n = 125$); and the control group was composed of other students from an array of undergraduate courses who were not enrolled in the career development course or in career counseling ($n = 94$). Student demographics included 58.1% female, 9.9% freshmen, 34% sophomores, 23.4% juniors, and 32.7% seniors. No demographic information was provided concerning the students' generational statuses. The CCCS was administered during the first two weeks and last two weeks of classes. A MANOVA revealed the control group was older and more advanced in class standing. Pre-post test differences were found only in the treatment group. The most significant difference occurred in the TTF subscale with decreased scores but VEC subscale scores increased significantly. TTF scores for the treatment group were reduced significantly, indicating a decrease in the tendency to foreclose early on career options. VEC scores were significantly raised, with modest effect sizes indicating students became more committed to career choices as a result of the intervention, but the researchers expected the result to be only modest, as individuals may need more exposure to career in question to become more committed.

The VEC and TTF scales contained in the CCCS will be used in this study as it has been tested not only with college student populations, but also as a test/re-test measure for intervention studies. The CCCS consists of 28 items, nine in the TTF subscale and 19 in the VEC subscale. Six of the scale items are reversed scored.

Participants are asked to “please indicate the appropriate number using the scale that most accurately reflects the extent to which you agree or disagree with the statement. If you do not currently have a specific career goal, respond to the following items in a way that would reflect your behavior and attitudes if you did have an occupational preference.” Items contain prompts such as “a sign of maturity is deciding on a single career goal and sticking to it.” Items are to be ranked on a seven-point, Likert type scale, 1 = never true about me and 7 = always true about me. High VEC scores indicate decreased commitment to career choices as well as the lack of ability to develop plans and prepare to overcome obstacles. High TTF scores indicate an individual’s tendency to avoid discomfort with the commitment process and that the individual is considering few career options. Low TTF scores indicate an openness to the commitment and exploration process.

Demographics Questionnaire

A short demographic questionnaire (see Appendix B) was created for the purposes of this study to assess the backgrounds of individuals participating in this study. Basic background information will be collected from participants such as age, college class, gender, ethnicity, and email address (for possible follow-up contact after the study). Additional questions assessing the father and mother’s highest level of education completed to determine FGCS status, enrollment in CED 210, and prior career counseling while in college will be asked as study screening measures. Students who check yes to participating in career counseling will be asked to list the topics covered in career

counseling to determine if individuals have covered the topics planned to be addressed in the intervention. Students are also asked if they are currently undecided or reconsidering their major and what majors and/or careers they are considering. Students in the treatment and control groups will receive this assessment as an initial demographic/screening assessment over email but will not be asked to complete this questionnaire again during data collection.

Group Evaluation Questionnaire

The group evaluation questionnaire was developed specifically for this study to evaluate participants' perceived effectiveness of the intervention. The survey asks participants to rate each group treatment activity or intervention on a 5-point Likert-type scale based on how effective they felt the intervention was in their major choice process. Results for each item will be averaged to determine the effectiveness of each intervention or activity.

Control Group Final Questionnaire

Control group participants will be asked to complete a final questionnaire developed specifically for this study to assess their exposure to career exploration topics over the five week treatment duration. Participants will be asked what steps they have taken over the past five weeks to explore potential majors and/or careers. They will also be asked if they have participated in career counseling, attended a career-related workshop, or enrolled in a group or class discussing career topics. Students will also be

asked if they have spoken to any counselor, faculty or staff member, or their parents in the past five weeks about their college major or future career.

Procedures

Participants for this study will be recruited through several methods. Counselors, peer career counselors, and staff will be advised on the purpose of the research study, how and who to recruit for the study, and provided with information to hand to potential study participants asking them to contact the researcher. Emails will also be sent through Career Services to the campus community recruiting for the group and asking potential participants to email the researcher for additional details. The researcher will also present the purpose of the research and recruitment information to academic advisors in the Students First office on campus. Follow-up emails will be sent to advisors asking them to refer students to the group. Advisors will also be provided with information to pass out to potential study participants during the first three weeks of the spring semester. Career services staff and academic advisors will be made aware of the exclusion criteria for the study in order to refer only students who have a higher potential of being able to participate in the study. Exclusion criteria include students who do not consider themselves FGCS, students who have completed their first-year of college, students who are enrolled or have been enrolled in CED 210, and students who are participating in or have participated in career counseling while in college (exceptions will be considered when the scope of career counseling only included job search strategies and resume/cover

letter construction). Only students who consider themselves FGCS and who answer no to all of the above will be considered for this study.

Students who are referred to the study or students who receive the recruitment emails and are interested in participating in this study will be asked to email the researcher for more information. Once the researcher receives the student email, students will be sent information concerning the nature of the study (including informed consent forms) as well as a short demographic questionnaire (see Appendix B) inquiring about semester in school, FGCS status, prior enrollment in CED 210, undecided or re-deciding their major, and participation in career counseling while in college; students will be asked to complete the form and return it to the researcher. Once the demographic form is received, students eligible for the study will receive a numeric ID unique to each student to be used when completing assessments. Names, unique identification numbers, email addresses, and demographics of viable study participants will be placed in a spreadsheet on the researcher's computer that is password protected. Once a minimum of sixteen participants have been identified, a random numbers generator will be used to assign students to the treatment and control groups.

Students in the treatment group will then be contacted to inquire about what days and times would be best to meet for a two hour group as well as a copy of the informed consent for the study to be returned during the first group meeting (when students will be read the oral script). Students in the treatment group will begin treatment as soon as a common date and time are set by the researcher. On the first day of the treatment group

meeting, students will take the initial pre-test assessments and be informed of incentives (food at every group meeting and \$5 upon completion of the study).

Students in the control group will be sent an email informing them they have been placed in an alternate group and asked what days and times would be convenient to meet to talk about next steps. In this meeting, students will receive the informed consent, take the assessments, be informed of incentives (pizza at every assessment meeting and \$5 upon completion of the study) and instructed not to seek out career counseling for the next five weeks when they will be contacted for a follow-up meeting. In the five week follow-up, students in the control group will retake the assessments and receive incentives.

Data will be collected twice from both the control and the treatment group. The treatment group will receive packets containing all scales as part of the five week group counseling curriculum. Assessment packets will be administered the first day of the group and the last day. Additionally, at the end of every treatment group meeting, participants will be asked to list the activities covered in group they found most helpful and least helpful. Assessment packets for the control group will be administered in a group setting on week one of the treatment group and five weeks later to coincide with the treatment group.

Intervention

Many FGCS mention attending college for improved career opportunities or to help their families out financially. The pressure to attend college for career or to help family can cause students also to feel pressured to choose a college major quickly or to choose a major they think will fulfill their desire to help their family financially, even if this major does not satisfy their interests. The curriculum, found in Appendix F, titled “The Major Decision” was designed to assist FGCS in the career development and career exploration process. The curriculum will be delivered by the researcher.

The activities contained in this curriculum manual are based in Social Cognitive Career Theory (SCCT). SCCT theorizes that a person’s self-efficacy and outcome expectations will translate to career interests and career goals. Goals that are clear and ones students are committed to will lead to actions that lead to successful completion of goals. According to Social Cognitive Theory, students gain self-efficacy through mastery experiences, vicarious experiences, social persuasion, and the physical/emotional states while completing tasks. When it comes to choosing a major in college, FGCS lack mastery experiences and they do not have the vicarious experiences of their parents to help build career or major decision self-efficacy. The activities and discussions in this curriculum were designed to provide students with the learning experiences they need to build self-efficacy surrounding choosing a major in college.

The five week group curriculum (see Appendix F) will cover the following:

Day One: Introduction to group, group rules, exploration of past career considered, career genograms

Day Two: Values exploration, Value Card Sort, FGCS mentor panel

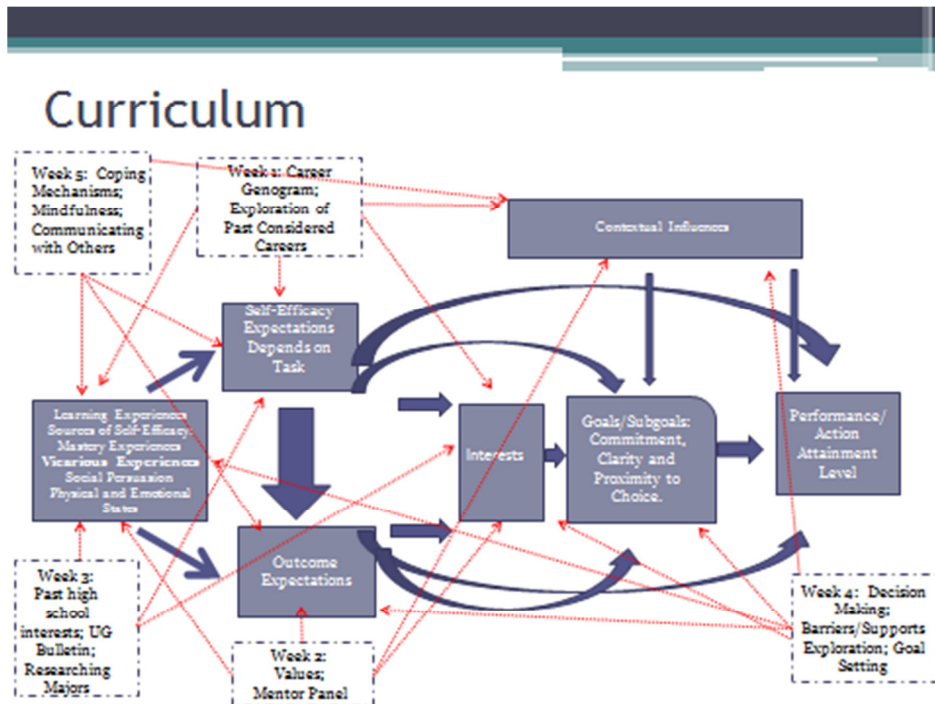
Day Three: Past high school interest exploration, introduction to the Undergraduate Bulletin, exploring majors on campus

Day Four: Decision making, barriers and supports exploration, and goal setting

Day Five: Coping mechanisms and mindfulness, communicating with others role play, closing activity

Figure 4 shows the topics covered in the career counseling group intervention and the SCCT areas addressed by each activity.

Figure 4. Curriculum



Data Analysis

Figure 5 shows the research questions and analysis used to address each research question. SPSS will be used to analyze all data collected.

Research Question One: Do FGFYCS report significantly different pre-post assessment scores in the commitment to career choices vocational exploration and commitment and tendency to foreclose scales after participating in a career counseling group?

Figure 5. Research Question One Variables and Analysis

	Independent Variable	Dependent Variable	Analysis
RQ1	First-generation College Status; Year in College	VEC scores TTF scores	Paired <i>t</i> -test

Research Question Two: Do FGFYCS report significant pre-post increases in career-decision self-efficacy after participating in a career counseling group?

Figure 6. Research Question Two Variables and Analysis

	Independent Variable	Dependent Variable	Analysis
RQ2	First-generation	CDSE scores	Paired <i>t</i> -test

	College Status; Year in College		
--	------------------------------------	--	--

Research Question Three: Do FGFYCS report significant pre-test to post-test increases in scores of vocational outcome expectations after participating in a career counseling group?

Figure 7. Research Question Three Variables and Analysis

	Independent Variable	Dependent Variable	Analysis
RQ3	First-generation College Status; Year in College	VOE-R scores	Paired <i>t</i> -test

Research Question Four: Are there a significant difference mean differences between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in commitment to career choices vocational exploration and commitment and tendency to foreclose scales from pre-test to post-test scores?

Figure 8. Research Question Four Variables and Analysis

	Independent Variable	Dependent Variable	Analysis

RQ4	First-generation College Status; Year in College; Treatment or Control Group Status	TTF scores VEC scores	Repeated measures MANOVA
-----	--	--------------------------	--------------------------------

Research Question Five: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in career decision self-efficacy scores?

Figure 9. Research Question Five Variables and Analysis

	Independent Variable	Dependent Variable	Analysis
RQ5	First-generation College Status; Year in College; Treatment or Control Group Status	CDSE scores	Repeated measures MANOVA

Research Question Six: Is there a significant difference between FGFYCS who participate in a career counseling group versus FGFYCS in a control group in vocational outcome expectation scores?

Figure 10. Research Question Six Variables and Analysis

	Independent Variable	Dependent Variable	Analysis
RQ6	First-generation College Status; Year in College; Treatment or Control Group Status	VOE-R scores	Repeated measures MANOVA

Pilot Study

Purpose

The purpose of the pilot study was to investigate the ease of use of the assessments and any possible interactions and trends that might be present in the relationships among the variables. In addition, the researcher hoped to illuminate any issues with assessment packet administration, to test vocabulary used in the demographic questionnaire, and to gain feedback on what students found helpful throughout the CED

210 course in their career development as a way of informing the construction of the curriculum.

Research Question 1: What is the reliability coefficient for the CCCS VEC and TTF scales for this population?

Research Question 2: What is the reliability coefficient for the CDSE for this population?

Research Question 3: What is the reliability coefficient for the VOE-R for this population?

Research Question 4: What aspects of CED 210 do students find to be most effective in their career development?

Research Question 5: What aspects of CED 210 do students find to be the least effective in their career development?

Participants

Nineteen participants were recruited to complete the assessment packets.

Participants' ages ranged from 18-22 years old, with a mean age of 20.18 (two participants chose not to report age); there were two males and 17 females. Racial/ethnic breakdown of the sample was reported as 13 white (with one participant also reporting Native American), five Black, and one multiracial. Five students were in their first year of college, four were second year students, and 10 students listed other class years.

Seven of the students in the sample reported being undecided or rethinking their college major. Seven of the participants lived on campus. Ten participants in the sample were

FGCS; both males who participated in the study were FGCS. Racial demographic breakdown of the FGCS in the sample was six white, one multi-racial, and three Black students. In the total sample, two students did not complete all assessments.

Table 1. Demographics of Pilot Study Participants

Demographic Characteristic	<i>N</i>	<i>%</i>
SEX		
Male	2	10.5
Female	17	89.5
TOTAL	19	100.0
ETHNICITY		
Caucasian/White	13	65
African American/Black	5	25
Native American	1	5
Multiracial	1	5
TOTAL	20	100.0
CLASS YEAR		
1st Year Undergraduate	5	26.3
2nd Year Undergraduate	4	21.1
Other	10	52.6
TOTAL	19	100.0
GENERATIONAL STATUS		
First-generation College Student	10	52.6
Non-First-generation College Student	9	47.4
TOTAL	19	100.0
CURRENT RESIDENCE		
On Campus	7	36.8
Off Campus	12	63.2
TOTAL	19	100.0
UNDECIDED or RETHINKING MAJOR		
Yes	7	36.8
No	12	63.2
TOTAL	19	100.0

Methods and Procedures

A sample of student participants was recruited from CED 210 courses. Emails were sent to CED 210 instructors in Fall 2012 asking for permission to administer the assessment packets in class. The researcher attended one section of CED 210 to recruit participants to take the assessment packets in class. The assessment packet included the CCCS, VOE-R, and CDSE as well as a demographic questionnaire designed specifically for the pilot study. Copies of assessments, pilot study demographic questionnaire, recruitment script, consent forms, and IRB approvals can be found in *Appendix G*. The researcher was available to answer any questions and noted any questions students asked. No incentives were provided to students who participated.

Data Analysis

Several data analyses were conducted to determine the feasibility of this research study with the population selected for investigation. Descriptive statistics and calculation of reliability coefficients were conducted in SPSS and are reported here. Qualitative statements were collected and analyzed by the researcher. Frequencies of overlapping concepts were tabulated for each qualitative question. Qualitative statements concerning the most helpful and least helpful topics/activities covered in CED 210 are reported here.

Results

Due to the small sample size of the pilot study, results should be interpreted with caution. Furthermore, two students did not complete the entire measure; one student

completed the first page of demographic data before withdrawing and the other student completed most of the assessments before withdrawing while completing the last page of the CCCS. Results are listed according to total descriptive statistics and descriptive statistics of first/second year students as well as FGCS.

Commitment to Career Choices Scale. Results from the analysis of Cronbach’s alphas for the CCCS indicated the total reliability alpha for the scale was adequate at .92 with 17 participants. When the VEC and TTF scales were analyzed, Cronbach’s alpha coefficient of the VEC was observed at .96 indicating high internal consistency, but the alpha observed for the TTF was .70 indicating questionable internal consistency of this scale with this pilot sample. When further analyses were run for first/second year students and FGCS in the sample, VEC and TTF Cronbach’s alphas were observed at .96 and .59, respectively, for first/second year students as well as .94 and .63 for FGCS. Further descriptive statistics for this sample are presented in Table 2.

Table 2. Descriptive Statistics and Reliability (Cronbach’s Alpha) for VEC and TTF in Total Sample

Population	N	Scale	Mean	SD	Alpha
Total	17	VEC	60.12	24.41	.96
		TTF	36.65	7.69	.70
<i>Descriptive Statistics and Reliability (Cronbach’s Alpha) by First/Second Year Only</i>					
Population	N	Scale	Mean	SD	Alpha
First/Second Year	8	VEC	51.0	23.63	.96

TTF 39.13 7.32 .59

Descriptive Statistics and Reliability (Cronbach's Alpha) by FGCS Status Only

Population	N	Scale	Mean	SD	Alpha
FGCS	9	VEC	60.0	22.19	.94
		TTF	37.44	7.60	.63

Further examination of the statistics above indicate that the total sample had fairly low VEC scores, indicating commitment to career choices and that they had taken into consideration obstacles to their path; TTF scores were average, indicating no conclusive results about the sample's tendency to foreclose early on career choices. First and second year students exhibited low VEC scores, suggesting commitment to choices, but their high TTF scale scores suggest first/second year students in this sample had a tendency to choose careers early in their development and to stay with these options. FGCS reported low VEC scores and high TTF scores, suggesting that the FGCS are committed to career choices but exhibit foreclosure behaviors.

Career Decision Self-Efficacy. The CDSE scale had high internal consistency of .92 for the total sample of 18 respondents. For FGCS in this sample, an alpha of .93 was observed. Student reported means for the total population and FGCS indicate students in both populations felt confidence in their ability to perform the tasks necessary to make a decision about their future career. Further descriptive data is provided in Table 3.

Table 3. Descriptive Statistics and Reliability (Cronbach's Alpha) for CDSE

Population	<i>N</i>	Mean	<i>SD</i>	Alpha
Total	18	103.33	12.99	.93

Descriptive Statistics and Reliability (Cronbach's Alpha) by First/Second Year Only

Population	<i>N</i>	Mean	<i>SD</i>	Alpha
First/Second Year	8	101	14.73	.89

Descriptive Statistics and Reliability (Cronbach's Alpha) by Generational Status

Population	<i>N</i>	Mean	<i>SD</i>	Alpha
FGCS	10	103.5	12.19	.93

Vocational Outcome Expectations-Revised. The VOE-R also had good internal consistency for the total sample of 18 respondents with an observed alpha at .89. This alpha was also observed for the 10 FGCS in the sample. The highest alpha observed was for first/second year students in the sample, with an internal consistency of .97. Means for the total sample indicated students have high vocational outcome expectations. Further descriptive data is reported in Table 4 below.

Table 4. Descriptive Statistics and Reliability (Cronbach's Alpha) for VOE-R

Population	<i>N</i>	Mean	<i>SD</i>	Alpha
Total	18	43.11	4.89	.89

Descriptive Statistics and Reliability (Cronbach's Alpha) by First/Second Year Only

Population	N	Mean	SD	Alpha
First/Second Year	8	45.25	5.04	.97

Descriptive Statistics and Reliability (Cronbach's Alpha) by Generational Status

Population	N	Mean	SD	Alpha
FGCS	10	43.4	4.74	.89

Effectiveness of CED 210 activities. Questions 12 and 13 on the demographic questionnaire asked students to list the three topic/activities covered in their CED 210 that they found most helpful and the 3 topics/activities they found least helpful in choosing or planning for their major or career. Student responses were collected and tabulated. All 19 students in the sample participated in this portion of the study.

Student answers regarding the most helpful CED 210 activities were varied, but there seems to be some similarities in the topics/activities students listed. The topic/activity listed most frequently by students in this sample was “RIASEC” (John Holland’s career interest codes); seven students listed this. Similarly, five students listed “assessments” and four stated “values sort” (an assessment). Some of the class assignments were also mentioned as helpful; resume/cover letter was mentioned by four students (resume alone by 1), career research project by four which is related to the statement “final paper” by two students (the final paper was the career research project). Class discussion topics (listed by 2 students) that were listed as helpful included goal setting, job availability, and professionalism. All topics mentioned are listed in Table 5.

Table 5. CED 210 Topics/Activities Listed as Most Helpful by Frequency

Topic/Activity	Frequency	Topic/Activity	Frequency
RIASEC	7	Job Availability	1
Assessments	5	Mock Interview	1
Resume/Cover Letter	4	Activities	1
Value Sort	4	Personal Timeline	1
Career Research Project	4	Personality Test	1
Final Paper	2	Presenting Presentations	1
Career Search Project	2	Projects	1
Lifework Lifeline	2	Professionalism	1
Class Discussion	2	Resume	1
Career Autobiography	1	Setting Goals	1
Career Fair	1	Skills	1
Career Services Scavenger	1	Values	1
Expenses Activity	1	All of this class	1
Experiential Component	1		

The CED 210 topics/activities that students listed as least helpful did not vary as much as the topics most helpful. Eight students listed words like “none, n/a, and nothing.” On that same sentiment, one student stated “enjoyed all.” Another student was “not sure” what was least helpful. Three students stated the lifework lifeline was least helpful. Other comments revolved around class assignments. Statements are listed with frequencies in Table 6.

Table 6. CED 210 Topics/Activities Listed as Least Helpful by Frequency

<i>Topic/Activity</i>	<i>Frequency</i>	<i>Topic/Activity</i>	<i>Frequency</i>
None	4	N/A	1
Lifework Lifeline	3	Online Assignments	1
Nothing	2	Papers	1
Career Research	1	Scavenger Hunt	1
Enjoyed All	1	Verbal Research Project	1
Job Description Print-	1	Weekly Chapter Presentation	1
Mock Interview	1		

Pilot study procedures. One of the purposes of the pilot study was to assess the ease of use of the assessments and the demographic form. Based on the manner in which students responded on the demographics questionnaire, several modifications will be made to the demographic survey. The demographic questions assessing mother and father's highest education level completed did not include a place for students to answer "did not complete high school." When asked to list the careers a student was considering, one student wrote "1." Further clarification asking students to list the titles or names of the careers they are considering could help clarify what the researcher is interested in knowing. It was estimated that the entire packet would take students around 20-25 minutes to complete. The first student to complete the assessment packet took six minutes; the last student completed the packet in 11 minutes. Finally, several of the assessments were printed on the front and back of a single sheet of paper. The researcher made a point to tell students to be cautious of this and several students were observed flipping through the packet to go back to complete questions they missed.

Discussion

Due to the small sample size of the pilot study, results should be interpreted with caution, yet due to the small sample expected for the full dissertation study, these results provide valuable information. Internal consistencies for all three assessments were found to be adequate, with only the TTF scale of the CCCS having an alpha that warrants caution. Reported alphas for the TTF scale have been reported as low as .78 (Blustein et al., 1989). Furthermore, the internal consistency of these measures had not been

established with FGCS and, in this sample, these measures were found to be reliable when separating out this population.

Students in the total sample felt strongly that they could perform the tasks necessary to choose a career. They also held high expectations for what would happen if they pursued their chosen career. Overall, participants in this sample expressed commitment to their career choices and a feeling that they had the knowledge they needed to make a career choice. Students in the sample also expressed average foreclosure activities. These findings could be the result of students just having completed CED 210, a course on career theory designed to assist students in the career exploration and commitment process.

First/second year students in the sample expressed confidence in their ability to perform career exploration and decision activities, strong outcome expectations when pursuing a career, commitment to career choices, and tendencies to foreclose early on career options (though this should be interpreted with caution). Prior research supports this finding; students earlier in their college career are thought to display more foreclosure behaviors as they have not been exposed to experiences with their chosen career (Blustein et al., 1989). This trend also held true for FGCS, as they expressed self-efficacy in performing the tasks to make a career decision, positive vocational outcome expectations, commitment level similar to the total population, and foreclosure activity levels similar to the total sample.

As for students' perceptions regarding what was most helpful and least helpful about CED 210, student responses can assist in the development of intervention activities for this study and to further structure career courses. Student responses around the most helpful activities in CED 210 concerned assessments, assignments, and discussions in class. This is helpful information as the intervention proposed for the dissertation study will involve at least one of the assessments mentioned (value sort) and is heavily based in discussion and process questions. Interestingly, none of the activities mentioned as least helpful are included in the proposed intervention study.

Finally, several adjustments to the demographic study will be made after the pilot study. A response category will be added to allow participants to select "Did not complete high school" when listing their parents' highest education level completed. Further clarification will be added to the question asking participants to list the careers they are considering. All pages in the assessment packet will be copied front only to avoid students inadvertently skipping questions.

Several limitations were present in the pilot study. The small sample size limits analysis and could be one of the reasons the internal consistency on the TTF scale was lower than that observed in previous research. Furthermore, this study included students from one section of CED 210 and should not be generalized to other sections of the CED 210 course. Finally, the assessments were administered after students had completed the CED 210 course, which could be one reason why the students expressed high outcome

expectations, career-decision self-efficacy, and commitment levels. These levels might have been very different at the beginning of the course and is worth further investigation.

Summary

Results from the pilot study provided helpful information for adapting the assessment packet administration. The time required to complete the assessment packets can be significantly reduced, which will allow more time for discussion during the first and last sessions of the intervention. Additional response criteria and clarifications will be added to items on the demographic questionnaire. Assessment packet materials will be one-sided pages for ease of completion by participants. Finally, observed alphas from the population intended for study were found to be high in almost every case, indicating internal consistency of the assessments.

Addendum to Chapter 3 - Overview

The research study as proposed was not completed due to low enrollment in the designed career group. Students who expressed initial interest in the group dropped out through non-response when requests to set up the first group meeting were sent. Follow-up emails were sent to students who expressed interest in the study as well as emails sent to students who were referred to the study, however an adequate number of participants could not be recruited for the full study.

A pilot study of the intervention was conducted with one participant who responded to the requests for the first group meeting. The participant was a nineteen year

old female in her first year of college. Neither her mother nor her father graduated from high school. The participant started high school with the intent to major in nursing, but changed her mind once she started taking the courses for her major. The pilot study was conducted over five meetings in four weeks. The participant showed a change in her scores on the three assessments after the intervention study. Her CCCS scores indicate a change in her TTF score that translates to a slight increase in foreclosure activities, or choosing a career without a thorough search. She did show a slight decrease in VEC scores indicating a change in her ability to make a decision and an increase in her knowledge of how to make a career decision. The participant's pre/post intervention scores on the VOE-R indicate an increase in positive outcome expectations related to career/occupational choice. Finally, the CDSE-SF scales indicate an increase in the participant's self-efficacy in her ability to make career decisions. Pre- and post-intervention assessment scores for the participant are presented in Table 7.

Table 7. Pre/Post Intervention Scores for Participant

Measure	Before intervention	After intervention
Commitment to Career Choices Scale	TTF:27; VEC:87	TTF= 35; VEC 80
Vocational Outcome Expectations Scale- Revised	2.25	3.5
Career Decision Self-Efficacy Short-Form	3.08	4.24

Through conversations with the participant, it became clear that there was more to the first-year, first-generation college student experience of being undecided or re-thinking their college major that was not represented in the literature. This additional information and additional experiences would help inform the proposed curriculum and add additional information to the literature on first-generation college students while adding an additional layer of information regarding the experience of being an undecided, first-year, first-generation college student. Based on this information, a Consensual Qualitative Research (CQR) study was designed to gather information regarding the experiences of first-generation college students who were undecided or re-thinking their college major during their first year.

CQR Research Questions

CQR uses research questions but not hypotheses to help results emerge from the data gathered rather than researchers developing pre-conceived ideas regarding what participants are experiencing (Hill, 2011). CQR attempts to allow participant experiences drive the formulation of theory and analysis. Therefore, research questions will be listed without accompanying hypotheses for this study.

CQR Research Question 1: What are the learning experiences and outcome expectations of first-year, first-generation college students who are undecided about their college major around choosing to come to college and choosing a career?

CQR Research Question 2: What are the learning experiences and outcome expectations of first-year, first-generation college students around becoming undecided about their major in college?

Participants

The population of interest remained the same as stated previously: first-generation college students who were undecided or re-thinking their major during their first year of college. The sample included eight participants which has been suggested as a sufficient number of participants given the nature of this research methodology (Hill et. al, 1997). Hill suggests adding more participants if too much variability exists in the data being collected or data is not consistent (2012). After eight interviews, the research team felt that the data collected pertaining to the stated research questions had reached the saturation point where no new information was being collected. Participants should be recruited using random sampling to help increase the likelihood that a representative portion of the population will be interviewed, however Hill acknowledges the difficulty with random sampling in this type of research (2012). A non-random sample was recruited for this study given the willingness of volunteer students to participate in the study.

Due to the timing of the study, recruited students had just completed their first year of college and were reflecting on their experiences from the previous year. One student had completed her second year of college, however, this participant recounted events from her first-year when she began to reconsider her intended major. The research

team decided her interview should be included in the data as her recounted experiences mirrored the interviews provided by the other participants and provided further homogeneity of data (Hill et al., 1997).

Recruitment Procedures

Researchers have stated that recruitment for qualitative studies can be influenced by the topic of the study, the time commitment required for the interview, the personal nature of the interview experience, and the requirement to be audiotaped (Hill, 2011). Participants are more likely to participate if they find the topic of study relevant or if they are interested in being helpful (Hill, 2011; Hill et al., 1997) therefore purposive sampling was utilized to recruit participants. According to CQR and other qualitative research traditions, the purpose of this type of research is not generalizability but to fully understand the experience of participants and to be able to transfer the results of their study to other members of the clearly defined population outside of the research participant sample (Hill et al., 1997).

Recruitment for this study occurred in three phases. In the first phase, students who had previously been recruited for the intervention study but were unable to participate due to the time commitment were sent personalized recruitment emails regarding the new study and inquiring about their interest in participating [Appendix H]. The recruitment email included information about the study, reason for the study, participant selection criteria, estimated time commitment, study incentives, and information regarding audiotaping and confidentiality as suggested by Hill (2011). In

phase two, academic advisors and CED 210 instructors were asked to send the recruitment email to potential students as well as to personally recommend students for the study. Students who were personally recommended for the study were sent the recruitment email by the researcher providing more details regarding the study as well as inquiring about potential participation. In the final phase, students who participated in the interview were asked to recommend the study to other friends who may be eligible for participation. Friends who expressed interest were sent the recruitment email to ensure they met criteria for the study as it was important for participants to identify as first-generation college students who were either undecided their first year in college or reconsidered their major during their first year in college. To avoid harassing potential participants, recruitment emails that did not receive a follow-up response were followed with only one additional email inquiring about interest in the study (Hill, 2011).

Volunteers who agreed to participate in the study were sent informed consent for the study via email [Appendix I]. Informed consent included information about the purpose and nature of the study, incentives for participation, as well as information concerning audiotaping of the study. Potential participants were given information regarding how their information would be kept confidential as well as a reminder that they could withdraw from the study at any time without penalty. Finally, participants were advised that the discussion of topics that are personal in nature may cause minor emotional distress and information regarding free resources on campus to assist with any potential emotion distress was provided. Participants were asked to provide a convenient

date and time to conduct the interview. Once the interview was confirmed, the researcher sent participants a copy of the primary interview questions to be asked [Appendix J] to allow participants to opportunity to recall and reflect on their experiences prior to their interview appointment. Researchers suggest sending participants the interview questions in advance if the time passé between the experience and the research interview may affect the participant's ability to recall the experience. By sending the questions in advance, the researcher increases the likelihood that the participant will be able to recall details of the experiences and reflect on important aspects of the experience which will enhance the data collected (Hill et al., 1997, Hill, 2011).

Description of Sample

The sample of participants consisted of eight female students enrolled in a mid-sized university in the southern region of the United States. Participants ranged in age from 18-19 year old with a mean age of 18.75 years. The sample represented a variety of ethnicities: three participants identified as Latinas, two as Asian/Asian Americans, two as White, and one identified as multiracial. Seven of the participants completed their first year of college the year the interviews were conducted while one participant completed her first year of college the year prior to interviewing. All participants identified as heterosexual/straight with six participants identifying as single, one identifying as in a committed relationship, and one choosing not to disclose her relationship status. All currently did not live on-campus but two participants did report living in an on-campus living-learning community their first year of college. All but one student reported

receiving financial aid. Of the students receiving financial aid, six reported receiving grants to pay for their education (with two also receiving scholarships and one receiving loans in addition to grants) and one reported only receiving loans. It is important to note that the one student not receiving financial aid disclosed in the interview process that she did not have a Greencard and was therefore unable to apply for federal financial aid. Average family income of participants was \$41,700 ($SD = 13,700$) with two students choosing not to report. The highest education obtained by participants' parents ranged from those who did not complete high school to one whose parents completed community of technical college. Three participants' mothers did not complete high school, four mothers completed high school, while one mother completed community or technical college. Of the participants' fathers, four did not complete high school, three completed high school, and one completed community or technical college.

Five participants were still undecided or re-thinking their college major while three reported they had decided on a major. The average time students spent as undecided or reconsidering their major ranged from one semester to one year with four students not reporting the length of their period of reconsidering their major. All of the participants reported they had not participated in career counseling while in college while two participants reported they had taken CED 210 during their first year of college. Participants reported considering the following careers/majors grouped by participant: nursing; tattoo artist, graphic design, and professor; Spanish, teaching, social work, and global studies; social worker and counselor; registered nurse; physician's assistant and

medical doctor; education, psychology and nursing; and one not reporting careers/majors of interest. Participants listed the following as their biggest concerns in college: support and financial needs; not knowing what will happen once I get my degree and actually have a job; financial issues and what major to choose; if I'm going to stick to my major; trying to "find me" in it all, the fast pace, balancing school and all my responsibilities at home; getting good grades, getting organized with my time, and finding time to study; Life: where will I end up? What will I do? What will I be happy doing?; and one participant who chose not to respond to this question.

Interview Questions

Consensual qualitative research relies on the words and stories of the participant gathered using a variety of methods including interviews to help inform data collection and analysis. In order to gain an in-depth view of the participants' experiences, interview questions are open-ended to allow participant elaboration and reflection (Heppner, Wampold, & Kivlighan, 2008). It is suggested that researchers use between eight to ten interview questions per estimated hour of the interview (Hill, 2011). In collaboration with her dissertation committee, the lead researcher developed a set of sixteen interview questions to try to access the experience of participants. Interview questions were developed according to current literature regarding the career choice process of students and the existing literature of first-generation college students. After the first ten interview questions, participants were asked to take the Commitment to Career Choices Scale as a way to begin discussing how participants feel about choosing a major, their

level of commitment to a major or career, and their ideas surrounding commitment to a career or major. After taking the CCCS, participants were asked a set of four questions regarding the scale.

The lead researcher conducted all interviews using a semi-structured format. The interview questions were designed to first help establish rapport with the participants. The first three questions of the interview were designed to build rapport with the participant and to help gather additional background information to help give context to the participant's experiences. The next seven questions were formulated based on a review of the literature of first-generation college students and Social Cognitive Career Theory to help gather information related to the research questions. The following four questions relate to the Commitment to Career Choices Scale and participant thoughts and reactions while taking the scale and reflecting on the items. Finally, the last two questions were formulated to reflect on broader issues as suggested by Hill (2011) to gather participant feedback regarding reasons for participation and reflections on the topics studied. Due to the semi-structured nature of the study, the researcher was able to ask follow-up questions to gain further insight into participant responses or to clarify existing responses (Hill et al., 1997).

Prior to beginning the interview, the lead researcher reviewed the informed consent documents sent over email and allowed time for participant questions. A brief overview of the interview structure was provided orally and participants were asked to take a short demographic questionnaire. The questionnaire covered basic demographics

as well as topics such as highest education completed by mother and father, family income, duration of being undecided in college, and biggest concerns while in college (see Appendix K). Participants all completed the survey in under five minutes with limited questions. After the survey was completed, the interview process began. Complete interview times ranged from 36 minutes to 71 minutes with the average interview taking approximately 52 minutes. All participants completed the Commitment to Career Choices Scale in less than nine minutes. The interview protocol is as follows (see Appendix L for interview protocol with follow-up questions):

1. Tell me a little about your hometown. Where did you grow up?
2. Tell me a little bit about your family.
3. What has college been like so far?
4. Describe how you chose to come to college?
5. Describe how you chose what to major in?
6. Who influenced you in these decisions? How did each person (name the people) influence you?
7. Did anyone not show confidence in you during these times Describe how you came to be undecided about a major.
8. What's difficult about being an undecided student? What kinds of things do you think about when considering a major?

Participant is asked to take the Commitment to Career Choices Scale.

9. What things came to mind while you were taking this scale?

10. Did any of the items stand out for you? If so, which ones? What made these stand out for you?
11. Are there things you expect from a major listed as items in the scale?
12. Let's talk about the questions you marked always true or never true. Where do you think those ideas came from?
13. What would you say to a first-generation college student entering college for the first time about choosing a major?
14. Why did you choose to participate in this project?

Consensual Qualitative Research

Qualitative researchers seek to understand an individual's point of view and/or lived experiences in the context of their worldview and realities (Heppner & Heppner, 2004). In order to capture as much of the participant's reality and experiences as possible, qualitative researchers rely on participant's description of experiences through interviews, observations, and other methods of inquiry (Heppner & Heppner, 2004). Consensual Qualitative Research (CQR) was developed based on the primary tenets of qualitative traditions such as grounded theory and phenomenology as well as feminist theories (Heppner et al., 2008). CQR uses a bottom up process to develop theories regarding the phenomena of study (Hill, 2011). CQR prefers to allow the data emerge from the stories of participants and utilizes consensus building by a research team through interactions with the data collected and team members to analyze data (Hill, 2011). During the data collection process, researchers are encouraged to ask open-ended

questions and follow-up questions to understand the phenomena as well as observe participant behavior during the interview (Hill et al., 1997). CQR has been found to be a beneficial form of research when little information exists regarding the phenomena of interest and/or when theory regarding the phenomena is under investigation (Hays & Wood, 2011). CQR was determined to be an appropriate methodology for this study due to the limited existing research regarding the experience of being an undecided, first-year, first-generation college student. Since this study aimed to explore and understand the experiences of this population and further develop existing theories, CQR provided a match of research methodology and collaborative data analysis process utilizing the expertise of a team of researchers.

CQR Data Analysis

The CQR data analysis process involves a well-established protocol to ensure the trustworthiness and replicability of the study (Hill, 2011). The process begins with the selection of interview questions, participants, the research team and auditors. Data is collected and transcribed with every effort taken to maintain confidentiality and any other ethical concerns. The research team meets to discuss research biases and expectations in a process called bracketing prior to data analysis. The research team is trained in CQR data analysis. Data is analyzed individually by each research team member by categorizing each participant's words into main themes called domains and core ideas mirroring the main idea behind participant experiences. The research team meets to reach consensus regarding domains and core ideas to ensure multiple perspectives have

been considered in data analysis (Heppner & Heppner, 2004). Once consensus is reached, data is sent to be audited by one or two auditor (Hill, 2011). Once an audit is complete, the research team revisits the data to make any needed changes in their analysis. Once domains and core ideas have been constructed for all participant transcripts, the core ideas are cross-analyzed to determine the frequency of each domain and core idea stated across transcripts (Hill et al., 1997).

Research Team

According to Hill, the CQR primary research team is composed of three to twelve team members responsible for analyzing the data collected (Hill, 2011). This team can be a “set” team of members or a rotating team depending on team members and the nature of the study. In addition one to two auditors should be utilized as part of the study. Auditors are responsible for reviewing raw data and coded data to be sure the team does not miss important concepts or pieces of the participant experience (Heppner & Heppner, 2004). In this study, a set team structure was utilized to allow researchers to become immersed in the data. All primary research team members were new to CQR data analysis; therefore two auditors with prior experience in CQR methodology and data analysis were selected to increase the trustworthiness of the study.

The lead researcher for the study was a White, female doctoral student in counseling and counselor education completing the study as part of her dissertation requirements. She served as the primary interviewer and the facilitator of research team meetings. She has done extensive research regarding first-generation college students

and has years of experience in career counseling as well as academic advising of first-year college students. Both of her parents graduated from college and her mother holds a Masters degree. The two other primary research team members were also doctoral students in the same counseling and counselor education program. One researcher was a White, female doctoral student entering her third year in the program who had done extensive reading on CQR methodology. She has taught a career and life planning course to undergraduates for two semesters and has extensive clinical counseling experience. Both of her parents graduated from college and her father is a university professor. The second primary research team member was a White, female doctoral student entering her second year in the same counseling and counselor education doctoral program as the other researchers. She has extensive experience in career counseling and was serving on another CQR research team at the time of the study. She was a first-generation college student who was undecided about her major for three years. The research team met for a total of fifteen times both face-to-face and over video conference. Meetings lasted from one to five hours with most meetings lasting two hours.

Both auditors were faculty members in the counseling and counselor education where the primary research team members were enrolled. The first auditor who was also a White, female served as the lead researcher's doctoral committee chair. She has prior experience conducting CQR studies as well as serving on CQR research teams. The second auditor also has prior experience conducting CQR studies and serving on CQR research teams. She was also a White, female with extensive research with first-

generation college students, particularly related to college access and the experiences of immigrant populations. She was also a member of the lead researcher's doctoral committee.

Bracketing and Research Training

Prior to analyzing the data collected, the research team met to discuss their research biases and expectations to allow the data to be approached free of these biases in a process called bracketing (Heppner et al., 2008). By expressing these expectations and biases to other members, the team can hold each other accountable during the data analysis process when biases are affecting analysis and the consensus process. This meeting also cleared up potential power differentials that may have existed among the team members (Hill, 2011). For instance, one team member inquired about the consensus process and what to do if all three members disagree with the assigned code of a passage. She asked if the team should default to the lead researcher since the project was "hers". The CQR consensus process was discussed and it was explained that all voices were equal and team members must explain their reasoning for coding a passage a particular way and make a valid case to all members. Consensus must be reached for a code to stand. This discussion was beneficial as the consensus process relies on the mutual respect and power sharing of all team members (Hill et al., 1997).

Prior to attending this first meeting, research team members were sent readings on CQR methodology and book chapters concerning biases as well as coding. At the first research meeting, team members received a copy of the training agenda (see Appendix

M). The training process was described and members were asked to express their biases prior to beginning the data analysis process. A summary of these biases and expectations can be found in Appendix N.

A domain list had been created by the lead researcher with feedback from the two auditors prior to the first research team meeting. This practice has been used in prior CQR studies and has been found to be an acceptable way to formulate domains as long as the research team members remain open to revise the domain list and definitions as the data is analyzed (Hill, 2011). Team member were asked to begin coding a small excerpt of the first interview as a way to practice data coding and the consensus process. Team members were then asked to code data separately and a second training meeting was held to clarify domain definitions and coding.

Rigor

When discussing the rigor of qualitative research, terms usually associated with quantitative research such as validity and reliability are replaced with terms such as trustworthiness, credibility, dependability, and transferability (Heppner et al., 2008). Several checks were used in this study to ensure the integrity of the data. Interviews were conducted by the same researcher to ensure interview and follow-up questions were asked as consistently as possible across participant interviews. The same interview protocol was followed for all interviews. Transcription of interviews was conducted by the primary researcher as well as a transcription service. Data analysis was performed according to the guidelines outlined by Hill (2011). Finally, the research team made

attempts to establish stability by noting when data collected had reached the saturation point and no new information was being added (Hill, 2011). By using the Commitment to Career Choices Scale in the interview, the researcher attempted to triangulate data by collecting information regarding the participants' levels of foreclosure to their career/major decisions as well as to check for contradictions in participant values and decision making. Participants were also asked to review the transcribed transcripts to ensure their words and thoughts were accurately represented. Finally, research team members held each other accountable for existing biases during the data collection process as a way to manage the subjectivity of the data analysis.

Ethical Considerations

The nature of the information participants disclosed as part of this study was very personal and could cause embarrassment to participants if their identity was revealed. Every effort was made to keep the identity of participants confidential. Participants were asked to create a four digit id known only to them for study materials. This id number was placed on the top of the demographic questionnaire, the CCCS, interview protocol notes, tapes, and transcripts. At no point were participant names tied to their interviews or interview documents. Only email addresses were collected for the purpose of sending transcribed interviews to participants for member checking. Participants were informed of the risks associated with the study and possible self-disclosure of participation. Finally, research team members were asked to sign confidentiality agreements regarding study data.

Data Coding

Prior to data coding, the interviews were transcribed verbatim. Not only did the participants themselves review the raw, transcribed data, but the lead researcher also reviewed the transcriptions for accuracy by comparing the written words to the audiotapes. In cases where the lead research was unable to decipher portions of conversations or phrases, the interview notes were consulted to check for accuracy. CQR data analysis protocol outlined by Hill (2011) was followed for this study. The first step in the data coding process involved sending the entire transcript to all members of the research team for domain coding separately based on the list of previously established domains. Research team members met to come to consensus on domain coding and then created core ideas for the data. Once this step was completed, the consensus version of the coded transcript was sent to the auditors for review. Once an audit was completed, research team members met to discuss feedback and adapt coding as necessary. Once all transcripts were coded according to domains and core ideas, the team began the cross analysis process noting the frequencies of domains and core ideas. A complete explanation of the research team process follows.

Domain. Domains are defined as the big picture topics and themes that are present across all interview cases (Hill et al., 1997). Originally, the lead researcher proposed a list of eight domains consistent with topics proposed by Social Cognitive Career Theory as essential in career interest development and goal formation. The research team was asked to individually block chunks of the transcribed interview quotes

into domains blocks (Hill, 2011). Team members then met to discuss data blocks and to reach consensus regarding domain coding. The lead researcher kept a master copy of the transcript with the domain consensus noted. While reviewing the first transcript, the research team noted topics that did not “fit” in the predetermined domains and noted this in the analysis in a domain called “Other” (Hill, 2011). Audits of the first transcript lead the research team to clarify domain definitions, add new domains, and to develop detailed reasoning regarding when to code domains. For example, the domain “emotional state” was only to be coded when an emotion was present in the transcript or replaying the audio-tape (as suggested in Hill, 2011) exhibited a clear emotion. Throughout coding of the remaining transcripts, researchers remained open-minded regarding domain definitions and addition of domains to ensure domains fit the new data (Hill, 2011). After all new domains emerged from review of the “Other” domain, previously coded transcripts were recoded to ensure consistency. The concluding domain list included eleven domains. It is important to note here that the audit of the first transcript also lead to a reevaluation of the initial research questions based on the emerging data. The research team met after the first audit and chose to modify the study research questions to allow for a more comprehensive analysis of the data collected. The “new” research questions eliminated the words “learning” and “outcome” as the team felt this language was placing bias on the construction and analysis of domains. The research questions were modified as follows:

Research Question 1: What are the experiences and expectations of first-year, first-generation college students who are undecided about their college major around choosing to come to college and choosing a career?

Research Question 2: What are the experiences and expectations of first-year, first-generation college students around becoming undecided about their major in college?

Core ideas. After transcripts were coded for domains and consensus reached, the team began constructing the participants' core ideas. Core ideas are defined as the main point and meaning behind a participant's words. Researchers are encouraged to use language that mirrors the participant's as much as possible while constructing brief, concise statements that will be used for cross analysis (Hill, 2011). The research team constructed core ideas together for the first four transcripts until consistency was reached. At this point, the lead researcher constructed core ideas and sent the items to the research team via email for member checking. After core ideas were constructed for each transcript, the final consensus document was sent to the auditors. The research team found audits to be very helpful during the construction of core ideas. In several cases, the auditors were able to note research team bias in constructing core ideas. The team then met to discuss reconstructing these core ideas and how to prevent potential bias in the future.

Cross analysis. Cross analysis is the point in the CQR process when researchers identify common threads throughout all participant experiences (Hill, 2011).

Researchers are looking at the frequency each core idea is stated across all participant experiences (Hill et al., 1997). Before the cross analysis process can begin, the data must be organized in one document that will allow for smoother analysis. The lead researcher compiled one document referred to by Hill as “the beast” (2011). “The beast” was created in Excel and included all transcript data divided into domains. A tab was created for each domain and accompanying transcript quotes (raw data) and core ideas listed for each domain and numbered according to the participant id who belonged to the data. A master list of all raw data coded into domains and core ideas by participant id was also created so that data could be cross-checked and placed into context if needed.

Categories. The cross analysis process begins with identifying the domain that will be easiest to begin dividing into core ideas into clusters called categories (Hill, 2011). By grouping core ideas into categories, researchers can then begin to see the frequencies of core ideas across cases (Hill et al., 1997). As suggested by Hill (2011), the research team met to categorize and cross analyze the first domain together. Core ideas were categorized in “the beast” and a master list labeled by domain was created by the lead researcher listing the categories and any additional subcategories along with the participant ids of transcripts that expressed these categories in the raw data. The first domain master lists as well as the corresponding raw data from “the beast” were sent for audit. After the initial audit, the research team met again to discuss auditor feedback. Core ideas were re-categorized based on feedback and placed into broader themes. CQR does not suggest a minimum or maximum number of categories however it is suggested

that categories be constructed so that they are broad enough to capture the core ideas (Hill, 2011). This process of categorization, auditing, re-categorization was completed for all domains. If at any point the research team found categorization difficult, the team returned to the raw data to better understand the meaning of the participant's words. In some cases, the research team found it necessary to recode raw data and place the data and core ideas into a different domain. When this occurred, the research team reviewed the previous cross analysis of the domain to include the newly recoded data.

Labels. During the domain cross analysis process of placing of core ideas into categories, each category is assigned a label based on the number of participants who endorse that category in their raw data (Hill et al., 1997). Labels assigned are *general*, *typical*, *variant*, and *rare* (Hill, 2011). *Rare* is only used in studies with a sample size over fifteen participants so it was not utilized in our analysis (Hays & Wood, 2011). *General* was the label assigned to categories that were endorsed by all participants and categories that were endorsed by *all but one* participant. *Typical* refers to a category that was endorsed by more than half of the participants but less than the cutoff point for general (Hays & Wood, 2011)- in this study *typical* was used for categories endorsed by five or six participants. *Variant* was used to describe categories endorsed by two to four participants. With the help of the auditors, the research team worked to ensure categories were not all *typical* or *variant* as suggested by CQR protocol and researchers (Hill, 2011).

Pilot Study

A pilot study was conducted to field test the interview questions, administration of the CCCS, and to gain feedback into question clarity. Hill suggests all CQR researchers field test their interview questions to ensure the researcher is gathering the necessary data based on the research questions (2011). The lead researcher conducted a pilot study of the interview questions with an African-American female approximately 23 years of age. The participant was a first-year graduate student at the university where this study was conducted. This participant was chosen to pilot test the questions as she was an undecided, first-generation college student during her first year of college. The researcher wanted direct feedback from someone who had lived the experiences being researched and would provide reflective insight into the experience. She felt a graduate student with experience in research may not feel as much of a power differential and therefore may be able to provide more informative feedback into the clarity of the interview questions.

The pilot study interview took approximately 90 minutes, including participant feedback. The interview portion of the pilot study was completed in 75 minutes. Completion of the CCCS took approximately ten minutes. The participant's feedback mainly centered around confusion regarding the demographic form and whether to answer for the present tense or the past tense (her first year in college). She had no trouble answering the interview questions and often reflected on how the experience of being undecided shaped future decisions. The researcher did note that probing or follow-

up questions were needed to elicit a more in depth responses from the participant. At the conclusion of the interview, the participant did comment that this study allowed her to reflect on experiences she hadn't realized influenced her.

Due to the feedback received from the pilot study, a few modifications to the interview protocol were made. A few of the follow-up questions were slightly reworded to clarify the researcher's intent. In addition, the researcher added language to introduce the CCCS and its purpose in the interview process. The final interview protocol can be found in Appendix O.

CHAPTER IV

RESULTS

Overview

This study was designed to explore the experiences of first-generation college students who were undecided or re-thought their career/major during their first-year in college. Data were collected utilizing a semi-structured interview protocol. Interview time ranged from 36 minutes to 71 minutes, with the average interview taking approximately 52 minutes. Interviews were audio-taped and transcribed. Questions were formulated to explore the experiences and expectations of first-year, first-generation college students who were undecided around choosing to come to college, choosing a career/major, and around the process of becoming undecided about their college major. In the following chapter, the sample will be described and the research findings based on the research questions will be disseminated.

Description of Sample

Eight participants from a mid-sized university in the southeastern United States who were undecided or re-thinking their major during their first-year of college shared their experiences for the study. Participants ranged in age from 18-19 years old, with a mean age of 18.75 years ($SD = .463$); all but one participant had just recently completed their first year of college. The sample represented a variety of ethnicities: three

participants identified as Latinas, two as Asian/Asian Americans, two as White, and one identified as multiracial. Four of the participants were born outside of the United States. Six of the participants' parents were born and raised outside of the United States. All but one participant reported having siblings. Average family income was calculated using 2.5 to representing an average income of \$20,000-29,000, 3.5 representing an average family income of \$30,000-39,000, etc. The average reported family income of participants was 4.17 or \$41,700 ($SD = 13,700$), with two participants not reporting average family income. Participant demographics are presented in the table below.

Table 8. Participant Demographics

ID no.	Age	Gender	Ethnicity	Class rank	Mother's highest education	Father's highest education	Family income	Hometown	Parents' country of origin	Careers considering
4998	19	Female	Asian/ Asian American	Rising 2nd year	Did not complete high school	Did not complete high school	Unsure	Vietnam; Greensboro, NC	Vietnam	Nursing
3622	19	Female	White	Rising 2nd year	High school	High school	50- 59,000	Lexington, NC	USA	Tattoo artist, graphic design, professor
3912	19	Female	Latina	Rising 2nd year	Did not complete high school	Did not complete high school	20- 29,000	Greensboro, NC	Mexico	Spanish teaching, social work, global studies
5423	19	Female	Latina	Rising 3rd year	Did not complete high school	Did not complete high school	50- 59,999	Mexico; Siler City	Mexico	Social worker, counselor
6829	19	Female	Asian/ Asian American	Rising 2nd year	High school	High school	40- 49,999	Greensboro, NC	Father- Vietnam; Mother- Cambodia	Registered nurse
9578	18	Female	Latina	Rising 2nd year	High school	Did not complete high school	40- 49,999	California; Raleigh, NC	Father- El Salvador; Mother- Guatemala	Physician's assistant, medical doctor
9119	19	Female	White	Rising 2nd year	High school	High school	20- 29,999	Florida; Winston- Salem, NC	USA	Education, psychology, nursing
8711	18	Female	Multiracial	Entering 2nd year	Community or technical college	Community or technical college	Did not report	Kuala Lumpur, Malaysia; Sweden; Greensboro, NC	Father- Germany; Mother- Malaysia	Did not report

All participants identified as heterosexual/straight, with six participants identifying as single, one identifying as in a committed relationship, and one choosing not to disclose her relationship status. All currently did not live on-campus but two participants did report living in an on-campus living-learning community their first year of college. Since the study was conducted after students had completed their first year of school and had already moved away from campus, it is unsure how many lived on campus their first year.

To finance their education, the participants used a variety of resources. All but one student reported receiving financial aid. Of the students receiving financial aid, six reported receiving grants to pay for their education (with two also receiving scholarships and one receiving loans in addition to grants) and one reported receiving only loans. The student who did not report using loans, grants, or scholarships to finance her education disclosed during the interview process that she did not have a Green card and was therefore unable to apply for federal financial aid.

The highest education obtained by participants' parents ranged from those who did not complete high school to one whose parents had completed community or technical college. Three participants' mothers did not complete high school; four mothers completed high school, while one mother completed community or technical college. Of the participants' fathers, four did not complete high school, three completed high school, and one completed community or technical college. As for careers, one

participant did not disclose during the interview process what her mother and father did for a living. One participant's father was a businessman and her mother was an artist; another participant's dad was a truck driver while mom stayed at home. Other participants' mothers were childcare providers and restaurant cooks, call center workers, seamstresses, factory workers, and assistant teachers. Participants' fathers were also farmers, factory workers, soldiers, and railroad managers.

At the time of the interview, five participants were still undecided or re-thinking their college major while three reported they had decided on a major. The average time students spent as undecided or reconsidering their major ranged from one semester to one year, with four students not reporting the length of their period of reconsidering their major. All of the participants reported they had not participated in career counseling while in college, although two participants reported they had taken CED 210 Career and Life Planning during their first year of college. Participants reported considering the following careers/majors grouped by participant: nursing; tattoo artist, graphic design, and professor; Spanish, teaching, social work, and global studies; social worker and counselor; registered nurse; physician's assistant and medical doctor; education, psychology, and nursing; and one not reporting careers/majors of interest. Participants listed the following as their biggest concerns in college: support and financial needs; not knowing what will happen once I get my degree and actually have a job; financial issues and what major to choose; if I'm going to stick to my major; trying to "find me" in it all, the fast pace, balancing school and all my responsibilities at home; getting good grades,

getting organized with my time, and finding time to study; Life: where will I end up? What will I do? What will I be happy doing; and one participant who chose not to respond to this question.

Summary of Findings

Consensual Qualitative Research (CQR) was the primary methodology used to analyze and interpret data gathered through semi-structured interviews. As mentioned in Chapter III, CQR allows participants' words and experiences to drive the analysis so data are viewed not in terms of proving preconceived hypotheses, but in how the data can help researchers gain a better understanding of the experiences under study. Data are analyzed by a research team; the research team for this project consisted of three primary researchers and two auditors. The three primary research team members were responsible for categorizing data into domains, core ideas, and categories, and assigning labels with frequency counts using the protocol outlined in Hill (2012). The *general* label was used for categories endorsed by 7-8 participants; the *typical* label was assigned to categories endorsed by 5-6 participants; the *variant* label was assigned to categories endorsed by 1-4 participants.

The auditors for this study were responsible for reviewing the work of the primary research team, providing constructive feedback to the primary research team during initial transcript coding and cross analysis, and reviewing the final cross analysis data. The primary research team met in person to code the first participant's transcript into

color-coded domains. Once the first transcript was coded into domains, the entire transcript was sent to both auditors for review. The auditors provided a list of edits and constructive feedback for the primary research team to consider. The primary research team met to consider the suggestions and recode the first transcript. The research team then sent the data back to the auditors along with a memorandum noting any changes after the first audit. This process was followed for the first three transcripts. After receiving the auditors' feedback from the audit of the third transcript, the research team found it necessary to revise the domain definitions. The revised definitions were sent to the auditors for review. The last interview transcripts were analyzed by the research team and each coded transcript was sent to the auditors for review. Auditor comments were reviewed by the research team and any changes were sent back to the auditors for review. Finally, the research team reanalyzed the first three interview transcripts with the new definitions and sent the final analysis to the auditors for comments. A final list of domains with their accompanying definitions is provided in Table 9.

Table 9. Domains for FYFGCS CQR Study

Domain	Definition	Example
Personal Experiences	Lived events, moment-to-moment experiences that involve awareness/reflection; first-person account	Visiting a local college and learning about the application process
Vicarious Experiences	Observed or heard of a specific person's lived experience; first-hand or second-hand accounts; may include lessons learned from observations	Hearing a friend talk about applying for financial aid and realizing you need to apply as well

Domain	Definition	Example
Social Persuasion	Specifically identified individual or group who gave directional feedback in response to action or pattern of behavior by the participant with the hope of a specific outcome; feedback mentioned is usually unsolicited	Parents suggesting you pursue a career as a lawyer because they say you are good at arguing.
Physical/ Emotional States	Participant feelings while performing a task or during an experience; emotional and somatic conditions	Transitioning to a new school can cause anxiety and stress. Meeting new people can make you feel sick.
Outcome Expectations	Beliefs about outcomes when an action is taken or task performed; can be physical, social, or self-evaluative expectations; also includes general expectations about life, self or others	When I pursue a major in ____, I expect I will make a lot of money
Reason for Participation	Motivations for participation discussed by participants.	Wanting to help others with your story
Messages	Implicit or explicit messages spoken about in collective terms by the participant. Messages are not necessarily a value but a message received by the participant.	Post-secondary degrees are required for any job in today's society.
Self-Efficacy	A person's belief in his/her ability to perform a given task (Bandura, 1986)	I am a skilled researcher.
Decision-Making Styles/ Cognitions	Participant expressed thoughts during the decision making process, mental steps during the decision making process, and reflections on their decision making style.	Weighing the pros and cons of a choice before making a decision
Values	Important beliefs or items considered important during experiences and decision processes	Choosing a career that makes you happy

At the beginning of the cross analysis process, the research team met in person to cross-analyze the first domain and sent the data to the auditors for review. The auditors provided a list of suggestions, alternate ways to analyze the data, and feedback regarding category and subcategory groupings. At this point, the research team reviewed the

auditors' feedback and re-analyzed the data keeping the auditors' suggestions in mind. The research team continued this process for the domains analyzed. As auditor feedback was received and reviewed, the primary researcher sent revisions to the research team members for comment and approval. Final domain analysis was sent to the auditors for final review. Final results are presented in tables 10 & 11 below:

Table 10. Results for Research Question One

What are the experiences and expectations of first-year, first-generation college students who are undecided about their college major around choosing to come to college and choosing a career?				
Domain 1: Personal experiences				
Category	Subcategory	Core Idea	Participants Endorsed	Label
High School			4998, 8711, 9578, 3622, 9119, 5423, 3912, 6829	General
	Type of Experience	Active (Seeking) Social Support for Career/ College	4998, 9578, 3912, 6829, 9119	Typical
		Active Steps toward college or career	8711, 5423, 3622, 9578, 3912, 9119	Typical

	Lack of support when sought	4998, 9578	Variant
	Happenstance opportunities for career/college opportunities	8711, 4998, 9119, 6829, 5423, 3622, 9578	General
	Happenstance social support	8711, 9119, 6829, 3622, 9578, 3912, 4998, 5423	General
	Lack of support for college/career	4998, 8711, 9119, 3622, 9578, 3912	Typical
People	Peers	4998, 8711, 9119, 6829, 5423, 9578	Typical
	Family	4998, 9119, 5423, 3622, 9578, 3912, 8711	General
	Teacher	4998, 6829, 5423, 3622, 9578, 3912	Typical
	High School Counselor	8711, 9119, 3622, 9578, 3912	Typical
	Significant Other	9119, 5423	Variant
	Siblings	4998	Variant
	Pastor	4998	Variant

Childhood			4998, 8711, 5423, 6829, 9119	Typical
	Type of Experience	Sought Experiences	4998, 8711, 6829	Variant
		Happenstance Experiences	8711, 5423, 6829, 9119	Variant
	People:	Family	4998, 8711, 6829, 5423, 9119	Typical
Domain 2- Vicarious Experiences				
Category	Subcategory	Core Idea	Participants Endorsed	Label
Reflections			4998, 8711, 9119,3912, 6829, 5423, 3622, 9578	General
	Topic	Career	8711, 9119, 6829, 5423, 3622, 9578, 3912	General
		Education	4998, 9119, 3622, 9578, 3912	Typical
		Decisions	4998, 8711, 9119, 3912	Variant
		Life	8711, 9119	Variant
		Struggle	9119, 3912	Variant

Provided By	Family	4998, 8711, 9119, 6829, 3912	Typical
	Parent	8711, 9119, 3912, 6829, 5423, 3622	Typical
	Peers	8711, 9119, 3622, 9578, 3912	Typical
	Teacher	9119, 3622, 3912	Variant
	Significant Other	9119	Variant
	People	9578	Variant
	Pastor	4998	Variant
Active Comparison		8711, 9119, 9578, 3912	Variant
Topic	College Decision Process	8711, 9119, 9578, 3912	Variant
	High School	8711	Variant
	Struggle	3912	Variant
	Person Providing		
	Peers	8711, 9119, 9578, 3912	Variant
	Parents	9578	Variant

		Family	3912	Variant	
		People	4998	Variant	
Domain: Social Persuasion					
Category	Subcategory	Core Idea	Participants Endorsed	Label	
Advice			8711, 9119, 5423, 3622, 9578, 3912, 6829	General	
	Type of Advice	Advice for College	8711, 9119, 3912	Variant	
		Advice for Career	8711, 9119, 5423, 3622, 9578, 6829	Typical	
	Person Providing Advice	Parents		3622, 9578, 9119, 8711, 6829	Typical
		Peers		3622, 9578, 8711	Variant
		People		8711, 9119, 5423	Variant
		Counselor		3912	Variant
Encouragement			4998, 8711, 9119, 5423, 3622, 3912, 9578, 6829	General	
	Type of Encouragement	Encouragement for college	4998, 8711, 9119, 5423, 3622, 3912	Typical	

	Encouragement for major/career	4998, 8711, 9119, 5423, 3622, 6829, 9578	General
	Encouragement to Stay Close to Home	4998, 9119, 6829, 3622	Variant
Persons Providing Encouragement	Family	4998, 9119, 5423	Variant
	Teacher	4998, 8711, 5423	Variant
	Counselor	4998	Variant
	People	4998, 5423, 3912	Variant
	Parents	8711, 9119, 6829, 5423, 3622, 9578, 3912	General
	Peers	9119, 5423, 3912, 4998	Variant
	Pastor	4998	Variant
	Discouragement		4998, 8711, 9119, 3622, 3912, 9578

	Type	Discouragement for college	4998, 8711, 9119, 9578, 3912	Typical
		Discouragement for career	4998, 8711, 9119, 3622	Variant
	People Providing	Parents	4998, 8711, 3622	Variant
		Teacher	4998	Variant
		Peers	9119	Variant
		Family	9119, 9578, 3912	Variant

Domain- Physical/Emotional States

Category	Subcategory	Core Idea	Participants Endorsed	Label
Ambivalent			9578, 4998, 8711, 3912, 6829	Typical
Positive			4998, 8711, 9119, 3622, 9578, 3912	Typical
Negative			8711, 9119, 6829, 3622, 9578, 3912	Typical

Domain Outcome Expectations

Category	Subcategory	Core Idea	Participants Endorsed	Label
----------	-------------	-----------	-----------------------	-------

Expectations about College		4998, 8711, 9119, 5423, 9578, 3912, 6829	General
	Uncertain Outcome Expectations	4998, 8711, 9119, 5423, 9578, 3912	Typical
	Positive	8711, 9119, 6829, 3912	Variant
	Negative	8711, 9119, 9578, 3912	Variant
	Ambiguous	4998, 8711, 6829, 5423	Variant
Career Expectations		4998, 9119, 6829, 3622, 9578, 3912	Typical
	Positive	6829, 3622, 9578, 3912	Variant
	Negative	9119, 3622, 9578	Variant
	Ambiguous	4998, 6829, 9578	Variant
	Uncertain Outcome Expectations	4998, 9119, 3622	Variant
Expectation of Major		4998, 9578, 8711, 9119, 3622, 6829	Typical

	Negative		4998, 9119	Variant
	Positive		4998, 9578	Variant
	Ambiguous		3622, 9119	Variant
	Uncertain Outcome Expectations		4998, 8711, 9119, 6829, 9578	Typical
Domain: Messages				
Category	Subcategory	Core Idea	Participants Endorsed	Label
Messages			4998, 8711, 6829, 3912, 5423, 9578, 9119, 3622	General
	Topic:	Work	4998, 8711, 6829, 3912, 5423, 9578, 9119	General
		Education	8711, 6829, 3912, 9119, 3622	Typical
		Drive	6829	Variant
		Collectivism	6829, 4998	Variant
		Gendered Messages about Work	8711, 9119	Variant
	Source of Messages	Family Messages	4998, 8711, 6829, 3912, 5423, 9578	Typical

Cultural
Messages

4998, 8711,
9119, 3622,
3912

Typical

Domain: Decision Making Styles/Cognitions				
Category	Subcategory	Core Idea	Participants Endorsed	Label
Personal/ Relational			9119, 5423, 3622, 9578, 8711, 4998, 6829, 3912	General
	Values Based Decision Making		9119, 5423, 3622, 9578	Variant
	Intuitive		8711, 3912, 9119, 4998, 6829, 5423, 3622, 9578	General
	Preference		6829, 3622, 5423, 8711, 9578, 4998	Typical
	Dependent Decision Making		9578, 5423, 8711, 4998	Variant
Educated/ Rational			8711, 3622, 9119, 3912, 6829, 5423, 4998, 9578	General
Personality			3622, 9578, 6829, 8711	Variant
Questioning Choice			8711	Variant
Forced Choice			9119	Variant

Domain: Values				
Category	Subcategory	Core Idea	Participants Endorsed	Label
Happiness in Career			6829, 3622, 8711, 3912, 9119	Typical
Helping			5423, 9119, 6829, 4998, 9578	Typical
Financial/ Job Stability			9119, 9578, 3912	Variant
Variant Life Values		Family	9119, 4998, 6829	Variant
Domain: Self-Efficacy				
Category	Subcategory	Core Idea	Participants Endorsed	Label
High Self-Efficacy			9578, 3622, 5423, 8711, 6829, 9119	Typical
		Self-Awareness	6829, 3622, 5423, 9578	Variant
		Ability to Make Career Decisions	9578, 3622	Variant
		Maturity Ability	8711	Variant
		College Attendance	8711	Variant
		Information Gathering	8711, 9578, 9119, 6829	Variant
		Overcoming Barriers	8711	Variant
Low Self-Efficacy			9119, 5423	Variant
			6829, 8711	Variant

Table 11. Results for Research Question Two

What are the experiences and expectations of first-year, first-generation college students around becoming undecided about their major in college?				
Domain: Personal experiences				
Category	Subcategory	Core Idea	Participants Endorsed	Label
College			4998, 5423, 3622, 9578, 8711, 6829, 3912, 9119	General
	Type of Experience	Active Decision-Making	4998, 8711, 6829, 5423, 3622, 9578, 3912	General
		Happenstance/forced decision making	8711, 6829, 9578, 3912, 4998	Typical
		Lack of Social Support//role models	8711, 9119, 5423, 9578	Variant
		Seeking Career Opportunities and Information	5423, 3622, 9578, 4998, 8711, 9119, 3912	General
		Actively seeking college adjustment	4998, 8711, 9119, 9578	Variant
		Seeking Support for Career/ College	9119, 6829, 3622, 9578, 4998, 3912	Typical

Happenstance social support for career/college 5423, 3622, 9119, 3912, 6829, 8711 Typical

Happenstance adjustment and independence 4998, 8711, 9119, 5423, 3622 Typical

People Peers 8711, 6829, 5423, 3622 Variant

Family 9119, 3622, 9578, 3912 Variant

Professors 9119, 6829, 9578, 5423 Variant

Counselor 5423, 9578, 3912 Variant

Domain: Vicarious Experience

Category	Subcategory	Core Idea	Participants Endorsed	Label
Active Comparison			8711, 9119, 4998	Variant
	Topic	Major choice	8711, 9119, 4998	Variant
	Person Providing	Peers	8711, 9119, 4998	Variant

Domain: Social Persuasion

Category	Subcategory	Core Idea	Participants Endorsed	Label
----------	-------------	-----------	-----------------------	-------

Advice			8711, 9119, 5423, 3622, 9578, 6829	Typical
	Type of Advice	Advice for Career	8711, 9119, 5423, 3622, 9578, 6829	Typical
	Person Providing	Parents	8711, 9119, 3622, 9578, 6829	Typical
		Peers	3622, 9578, 8711	Variant
		People	8711, 9119, 5423	Variant
Encouragement			4998, 8711, 9119, 5423, 3622, 6829, 9578	General
	Type of Encouragement	Encouragement for Major/Career	4998, 8711, 9119, 5423, 3622, 6829, 9578	General
	Person Providing	Significant Other	9119	Variant
		Boyfriend's Mom	9119	Variant
		College Advisor	3622	Variant
		People	4998, 5423	Variant
		Teacher	8711	Variant

		Parents	3622, 6829, 9578	Variant
Discouragement			8711, 4998, 9119, 5423, 9578	Typical
	Type	Discouragement for Career	8711, 9119, 5423, 9578, 4998	Typical
	People Providing	Parents	8711	Variant
		People	4998, 9119, 9578	Variant
		Peers	9119, 5423, 9578	Variant

Domain- Physical/Emotional States

Category	Subcategory	Core Idea	Participants Endorsed	Label
Ambivalent			9578, 4998, 8711, 9119, 3622, 3912	Typical
Negative			8711, 9119, 6829, 3622, 9578, 3912	Typical

Domain: Outcome Expectations

Category	Subcategory	Core Idea	Participants Endorsed	Label
Expectations of Self			9119, 3912, 8711, 6829, 5423, 9578	Typical
	Positive		9119, 5423, 6829	Variant
	Negative		3912	Variant

	Ambiguous	9119, 8711	Variant
	Uncertain Outcome Expectations	9578	Variant
Expectation of Decision		4998, 8711, 9119, 3622, 5423, 9578	Typical
	Positive	9119, 5423, 3622, 9578	Variant
	Negative	4998, 8711	Variant
	Ambiguous	4998, 9119	Variant
	Uncertain Outcome Expectations	9578, 4998, 8711	Variant
Expectations of Others		3912, 4998, 8711, 9119	Variant
	Negative	4998, 3912	Variant
	Uncertain Outcome Expectations	8711	Variant
	Ambiguous	8711, 9119	Variant
Career Expectations		4998, 6829, 3622, 9578	Variant
	Positive	6829, 9578	Variant
	Negative	3622	Variant

Expectation of Major	Ambiguous		4998, 6829, 9578	Variant
	Uncertain Outcome Expectations		4998, 6829, 3622, 9578	Variant
			4998, 9578, 8711, 9119, 5423, 3622, 6829	General
	Uncertain Outcome Expectations		4998, 8711, 9119, 6829, 5423, 3622, 9578	General

Domain: Messages

Category	Subcategory	Core Idea	Participants Endorsed	Label
Messages			8711, 9119	Variant
	Topic	College Stigma Against Undecided	8711, 9119	Variant
	Source of Messages	Cultural Messages	8711, 9119	Variant

Domain: Decision Making Styles/ Cognitions

Category	Subcategory	Core Idea	Participants Endorsed	Label
Personal/ Relational			9119, 3622, 5423, 4998, 9578, 3912	Typical
	Values Based Decision Making		9119, 3622	Variant
	Intuitive Preference		4998, 5423, 9578	Variant
			3622, 5423, 3912	Variant

Educated/ Rational			8711, 3622, 9119, 3912, 6829, 5423, 9578	General
Personality			8711, 3912, 9119, 9578, 6829	Typical
	Run Out of Time/ Procrastinate		8711, 3912, 9119, 9578, 6829	Typical
	Keep Options Open		8711, 3912, 9578	Variant
	Independent		9578	Variant
Decision Final			9119, 5423, 4998	Variant
Too Many Choices			8711, 9119	Variant
Goals Needed			9119	Variant
Domain: Values				
Category	Subcategory	Core Idea	Participants Endorsed	Label
Variant Life Values		Not Wasting Time	9119, 9578	Variant
Domain: Self-Efficacy				
Category	Subcategory	Core Idea	Participants Endorsed	Label
High Self- Efficacy			3912, 9119	Variant
Low Self- Efficacy			3912, 8711, 4998, 6829, 9119, 9578	Typical
		Intelligence	3912	Variant

	Major	8711, 4998, 6829, 9119	Variant
	Ability	9578, 4998	Variant
	Ability to Make Career Decisions	3912	Variant
	Self- Awareness	4998, 9119, 6829	Variant
Uncertain Self- Efficacy		4998, 6829	Variant

When responding to interview questions regarding the decision to come to college choosing a career, the eight first-generation college students who were undecided about their college major during their first-year of college described both active and happenstance experiences regarding college enrollment; career and college admissions experiences and information; and lack of support from family, peers, teachers, and high school counselors. They also reported vicarious experiences through reflections and active comparisons regarding career, education, and decisions provided by family, parents, peers, and teachers. Social persuasion in the form of advice, encouragement, and discouragement for college and career were provided by parents, peers, family, and teachers. They reported receiving messages about work and education from family and culture. First-generation college students who were undecided about their major during their first year of college discussed positive, negative, and uncertain expectations of college, major, and careers. In their responses, FGCS expressed positive, negative, and

ambiguous emotions when discussing their experiences. Their decision making styles and cognitions reflected personal/relational, educated/rational, and personality based decision making. Values expressed included happiness in career, helping, job stability, and life values. Finally, participants' responses reflected high self-efficacy around their ability to make decisions, college attendance, abilities, and self-awareness.

When asked questions surrounding becoming undecided, FGCS expressed college experiences around active and happenstance decision making; lack of support and role models; seeking opportunities, support, and information; and actively seeking college adjustment. Participants reported vicarious experiences involving actively comparing the major choices of their peers. Social persuasion included advice about career from parents, peers, and "people" used as a general term by participants; encouragement for career/major provided by parents, "people," and significant others; and discouragement for career and college provided by parents, peers, and "people." FGCS expressed positive, negative, ambiguous, and uncertain expectations of self, career, and decisions. They expressed negative, uncertain, and ambiguous expectations of others and ambiguous and uncertain expectations of their majors. While discussing the experience of becoming undecided about their major, participants' responses reflected ambivalent and negative emotions and physical states. Some participants reported receiving cultural messages about the stigma around being undecided. Two participants mentioned the value of not wanting to waste time. FGCS decision making styles and cognitions around becoming undecided reflected personal/relational, educated/rational, and personality

based decisions. Two participants indicated high-self-efficacy, but most spoke about low self-efficacy as it relates to intelligence, major, ability to make decisions, and self-awareness.

Domains, core ideas, and categories will be defined and discussed in the following section. In order to provide a full understanding of the data, participants' words will be included in the description.

Domain, Core Ideas, and Categories

Concerning the two research questions studied, a total of nine domains emerged, each with relevance to both research questions. The domains included a) personal experiences, b) vicarious experiences, c) social persuasion, d) physical/emotional states, e) outcome expectation, f) messages, g) decision making styles/cognitions, h) self-efficacy, and i) values. The domains along with corresponding core ideas and categories will be discussed in the remainder of the chapter.

Personal Experiences

Personal experiences are personal lived events, moment-to-moment experiences that involve awareness/reflection. They were typically stated as first-person accounts. Participants expressed personal experiences that occurred in high school and childhood involving happenstance as well as active experiences around career choice and college attendance. They also described college experiences related to becoming undecided.

High school. Seven out of eight participants described happenstance opportunities for career and college opportunities. Happenstance opportunities were experiences that were not sought out by the participant but provided opportunities for career or college attendance. For instance, participant 4998 stated this about her desire to be a nurse:

In high school, I got to do the CNA [Certified Nursing Assistant] program so that was my first time. We got to go to nursing homes, the hospital in Chapel Hill. We had to gain skills with feeding and all that. Then, I had patients who like come up to me and thank me. They thank me and say they are grateful I made this decision and you know it's support because they need someone to take care of them since their families aren't there. So, I think about that and it makes me want to [pursue a career in Nursing].

Participant 5423 stated a similar experience related to her decision to attend college and the college choice process while participating in a high school program for Latino students.

Then I came here and I really liked the campus because it's not big but it's not small. When I got here I didn't get lost. And when I went to...since I was a part of SLI, Scholars Latino Initiative in high school –that's in Chapel Hill, so UNC Chapel Hill. I would go there all the time and I would always get lost. I went for 3 years like every weekend and I would always get lost. So I don't want that to happen to me for my college. I don't want my college to be that big. So I was like UNCG will work for me. It's small; it's nice; it's comfortable. It feels at home here. So everybody is really nice and attending to... I really like it here. That's why I am here.

All eight of the FGCS in this study mentioned happenstance social support they received for career choices and college attendance. These experiences were support that was given but not asked for. Participant 9578 discussed support for college attendance during high school college field trips: “Well, in high school, they take you to all these fieldtrips to visit different colleges. Well, that's how I was like, ‘Oh, well, I want to go to college. I want to live on campus. I just want to go.’”

Six participants discussed taking active steps to attend college or to pursue their career choices. One participant (9119) discussed how choosing to take a course toward her desired career in high school changed her mind: “My senior year I took the teacher cadet class and I didn’t like it, so I was, I had put in, you know, to be a teacher.”

Participant 3912 also discussed choosing to take a high school class that supported her first career choice:

...in high school we had, like, different career classes. Like, you could – I think there was, like, an engineering one. There was, like, um, art, band, and there was, like different things that you could choose, and out of all of ‘em, out of all of them, I think the nursing one was the one that really interested me the most. Went to that path, and I took the first class and then Medical Careers 1 and then Medical Careers 2, and then I think that’s when it was, like, “Okay, this is what I wanna do. I wanna be a nurse.” I think that’s what influenced me the most –

In terms of asking for or taking steps while in high school to obtain social support for college or their chosen career, five participants spoke about actively seeking support

from others for their endeavors. Participant 9578 spoke about seeking support from her high school teacher when filling out her college applications:

But it was only two questions that I had because the application was pretty straightforward – your name, what high school, and the essay part. The essay, I took AP English in high school, so I had my teacher, she had experience with all those things, so I showed her my essay and I was like, "Well, how does this look?" She just got a quick look at it and she was like, "Oh, it looks good."

Participant 6829 discussed the importance of her peer network when it came to support during her high school. Her story reflected an active effort not only on her part to be supportive of her friends but also her peers' efforts to be supportive of her choices:

Interviewer- Did any of those people influence you at all?

Participant- I know teachers did, yeah, and my friends because I know my friends. It's kind of crazy how my friends that I came to high school with, the ones in middle school – they all went to the same high school as me and they all are interested in the medical field. So we kind of gave each other that push because we know, like, the struggles of the medical field. I know one of my best friends wanted to become a pharmacist, most are nurses and stuff like that. It's just that push of understanding, you know, the struggles of the competition of the medical field, especially in nursing, because I know nursing is a really competitive program to get into in any college, not just UNCG. Even in the community college it was really competitive.

Not all students garnered support when it was sought and some participants discussed a lack of support for the career choices or for the college attendance process. Six participants made statements that reflected this lack of support while in high school. Participant 4998 summed up this lack of support with a statement to reflect her efforts to

pursue college attendance: “If I was to get out of high school and get a job, that was okay with my parents. So, it was pretty much me.” Lack of financial and social support for college attendance was also reflected in the statement of Participant 8711 who discussed being told by her father that she could not attend the college of her choice: “Exactly, so my dad was like we can’t send you there.” Participant 3912 similarly discussed a lack of informational support for college attendance:

Well, I knew that even though when I was in ninth, eighth, tenth, eleventh, and twelfth grade all, that was always something that I wanted to do, but it wasn’t something that I knew about, like, you know, information or how to pay for it or what to do or how to – when to start because no one around me, like – like, this was something that no one knew, so, like, for me to bring it up it’s, like, “What is that,” you know ?

Two of the eight participants discussed lack of support when it was sought. Participant 4998 discussed seeking support from her parents for the college application and decision process, but noted “I wasn’t able to talk to them about any school-wise decisions.”

As reflected in the quotes above, the high school personal experiences of support and lack of support for college attendance and career came from a variety of sources. The research team felt it was important to capture the source of high school personal experiences. Similar to the quote from Participant 4998 above, seven of the eight participants discussed family experiences when talking about high school support or lack of support for college attendance. Like Participant 6829, six of the eight participants

mentioned peers as part of their experiences in high school toward college attendance or their chosen career. Participant 9578 discussed seeking her teacher's support during the college admissions process; six total students mentioned their teachers in the high school experience of the process of college attendance or choosing a career. High school counselors were mentioned by five of the eight participants, as demonstrated by Participant 8711 when discussing support for the college application process: "Because I went to such a big high school, like we would have 10 minutes with our counselor and that was it. We had emails but there was like nothing else there." There was also the experience of Participant 9119 who found support in her chosen career through her high school counselor: "My school counselor – I loved her to death and I was like [being a school counselor is] an option too, so that's kind of in the back of my head." Two participants mentioned significant others as part of their experiences in high school, such as Participant 9119:

And then when I was trying to apply for financial aid my boyfriend helped me a lot because he's a little older than me and he did go to college and he like, he was, "You gotta send this form in, and you gotta do this for financial aid." And I was like, "Oh my gosh, thank you! Cause I wouldn't have like, known what to do."

Finally, Participant 4998 was the only person to mention siblings and her pastor as part of her high school experiences toward college attendance or her chosen career: "With nursing, before speaking to my pastor or [participating in] the CNA program, I didn't even really think about it, so after that, that's what really made me decide." She

also spoke of her sister's support throughout high school: "She took me to the hospitals, to school events, pretty much like a mother."

Childhood. Five of the eight participants in the study discussed childhood experiences that lead to college attendance or future careers that stood out to them. All five mentioned family in regards to these experiences. Some participants discussed happenstance experiences during childhood, such as Participant 9119:

Well, I was like, really set on education because when I was little I used to play school with my sister, like she always says I taught her her multiplication tables, but I don't believe that cause (noise) I don't believe that because she was older than me and like now. But she always says that and so in high school I was like sure, I'm going to be a teacher.

Others discussed actively pursuing experiences during childhood that led to college attendance or choosing a career. Participant 4998 summed up this sentiment when describing the things she did to set herself on a path toward a college education: "So we have to push ourselves; our parents like didn't, school wasn't a big thing."

College. All eight participants discussed personal experiences in college around becoming undecided. Responses included the experience of happenstance/forced choice, actively making the decision, lack of role models or support, seeking career opportunities or information, seeking support, seeking college adjustment, happenstance support provided, and happenstance adjustment. Participants mentioned people such as family, peers, counselors, and professors when discussing these experiences.

Seven participants spoke about seeking career opportunities in college that helped them make the decision to become undecided about their major. For instance, Participant 5423 discussed how taking courses toward her first major led her to change her mind and start seeking more information: “Yeah, and there was a bunch. It wasn’t like only one. It was a bunch of classes - the sciences chemistry, biology, all that. And I was like no. And then I searched around and then I saw psychology.” Others, like Participant 9119, discussed their thoughts while undecided that had helped her stay undecided:

and like that’s why like the other day I was just throwing stuff out there like “I could be a counselor that does sign language and talks to deaf people,” just like something crazy like that, cause I’ve been taking sign language and I was interested in [that as a career] and I thought I might be [good at it].

Participant 3622 discussed an experience attending an information session for her chosen major that led her to become undecided:

And, um, I went to an art education meeting that they had, um, where they like talked about stuff that they do and everything and it seemed like they were more focused on like elementary and like middle school level art whereas for me like I consider myself a very intelligent person so like my brain functions a lot higher and I was like, “Well no, like if I teach I want to be on the high school level or like even, like, I honestly kind of want to be a professor as well.”

Seven participants also discussed experiences of actively making decisions that lead to becoming undecided about their majors while in college. While discussing her decision process regarding what to major in, Participant 3622 stated, “I guess you just –

you just don't know what to do until you talk to somebody who can give you like more insight on like one area versus another, I guess, if that makes sense." Participant 3912 discussed actively making the decision to become undecided: "I wanted to be a nurse and I was taking the chemistry, the biologies and all those classes that I did not enjoy at all. And then in the middle of that, I decided I didn't wanna be a nurse anymore." Finally, Participant 8711 stated, "I came here undecided."

During college, five of the eight participants spoke of feeling a forced or happenstance decision when it came to becoming undecided. Participant 9119 spoke of her indecision and switching career choices frequently: "Every time I think I've like kinda settled on one, another completely different option comes up and I'm like 'that would be fun' you know." Participant 5423 discussed feeling she had to change her major due to finding the coursework for her chosen career was not what she liked: "I want to help people, but then when I got into the actual classes I was like, I don't like science, it's not for me. I can't do that."

Six of the eight participants reported seeking support for their career decisions and college attendance while in college. Participant 9119 discussed what happened when she discussed being undecided about her major with her father, "But, and then my dad's like, every time I say I don't know what to do, he goes, 'Well, look at me, I'm 55, I still don't know what I want to do with my life.' (laughs). Like, okay, Dad. Or he says, 'I still

don't know what I want to do when I grow up.'" Participant 5423 discussed seeking support from peers and teachers during her career decision and transition process:

So it's like you meet other people that are in the same situation as you. That kinda helps you out. Helping you look into things. Teachers as well. I remember I asked one of my professors what it was—how it felt, how that field worked and how that major was. She helped me a lot.

Participants also experienced happenstance support for career/college during the process of becoming undecided. While discussing her transition from undecided, Participant 5423 reflected on the support of her roommates: "Yeah, but my roommates would help me out 'cause , om, actually now that I changed majors, 2 of my other roommates changed majors too. And, to the same major I did. So we are all in the same major now." Participant 3622 also discussed her indecision with a friend and gained support:

...and then I started talking to a friend of mine that I met through the fundamentals class, um, and he was like, "Well if you like painting I don't understand why you're not just a painting concentration." And I told him I was like, "Well, you know, how am I supposed to get a job with that," and he was like, "You do realize when you – when you graduate it's gonna say you have a BFA in Studio Art, like it's not gonna say that you were painting or like, you know, whatever concentration you decide."

Four participants described periods of actively seeking college adjustment that changed the way they felt about their current majors and college. Participant 3912 discussed her process to adjust and stay in school even though she became undecided: "I was, like, 'I'm just gonna find a job and just quit.' But then I just decided to keep on

going this semester, and then this semester was very, very good because I found, like, good professors that helped me out.” Participant 8711 stated,

I decided to like get involved on campus. That was like my first step and that like really helped because I met so many great people, especially after I got over that bitter phase. So, that really helped me and then second semester was great. I had like...it was the best semester because I met like all these different people and I was just doing more things. Like, what happened first semester was that I was not doing anything.

During the process of becoming undecided, participants spoke about happenstance experiences that led to college adjustment or the feeling of independence. When discussing the courses she took first year as an undecided student, Participant 8711 stated, “The thing is, the classes I was taking, they were just, they weren’t challenging to me so I had so much free time and it was just too much free time I think is what happened.” Participant 6829 discussed the transition and her experiences in college while deciding on a major: “I got the knack of it, you know, the gist of it. And, of course, you learn every day and of course the classes are going to get harder but that’s life, so....”

Four out of the eight participants spoke of a lack of support and/or role models while in college for career decisions or college attendance. Participant 9119 summed up this experience well:

Like I said, just not having a, like a really stable and like, uh, like a really like, I just wish I had a perfect role model, just someone who is, like, been where I’ve been and then made it through and is just successful, just like I want to like sit and talk to them (laughs) you know? Just not having

anyone to make, I've never been around anyone who has to make educational or career decisions so I don't even know what kind of thought processes to go through or anything.

Similar sentiments were expressed by Participant 5423:

So like it's hard, especially if you don't have anybody else that has been through it. So it's like I have to do it on my own. I have to research, I have to ask teachers, I have to ask other people 'cause my parents they didn't go to college so they don't know much about it. Like they couldn't help me out much. They would just tell me that they would support me in whatever I do.

As expressed in the above quotes, participants mentioned a variety of people when discussing college experiences around becoming undecided about their college majors. Four participants mentioned peers as part of their experiences, similar to the quote from Participant 3622 regarding the support she received from a friend regarding changing her chosen major. Family was mentioned by four participants when discussing the experiences around being undecided, similar to the quote from Participant 9119 regarding her dad's support for her indecision regarding her major. Like the quote from Participant 5423, three students mentioned professors being influential around their experiences becoming undecided about their majors in college. Three participants also mentioned counselors as part of their experiences around becoming undecided, such as Participant 9119 who discussed seeking counseling in college to help with her decision making as well as other concerns she had in college: "Cause like I took - I went to the

psychologist here and did counseling here and like just to help me with just life problems in general.”

Vicarious Experiences

While discussing their experience surrounding choosing to come to college, choosing a career, or becoming undecided, participants mentioned numerous forms of vicarious experiences. Vicarious experiences were defined as when participants observed or heard a specific person’s lived experience. These experiences were told as both first-hand or second-hand accounts. Generally, when discussing these experiences, participants spoke of lessons learned from observations of others. Two categories emerged from the data concerning vicarious experiences: reflections and active comparisons. Reflections were described as the participant reflecting on the actions or their observations of others. Active comparisons refer to the action of changing behavior, taking action, or contrasting behaviors based on one's observations of others.

Reflections. When discussing the decision to attend college and choosing a career, eight participants discussed reflections on various topics, including career, education, decisions, life, and struggle. Many of these vicarious experiences came from reflecting on the actions of family, parents, peers, teachers, significant others, pastors, and people in general.

Seven of the eight participants in this study referred to career reflections. Participant 8711 reflected on where her career interests came from by stating, “I think it

was mostly, mostly because of my dad. Like, um, he worked a lot with money and stuff like that and he would...and he taught me about economics and that's why I am interested in it." Participant 9119 reflected on watching her mother: "My mom was a single mom, you know? So she would have worked like two or three jobs, we still wouldn't have had enough money and it was just, I don't want to be like that, honestly."

Education reflections were discussed by five of the eight participants.

Participants reflected on the education experiences of others and even how vicarious experiences and reflections affected their decisions. While discussing her college decision process, Participant 9119 stated of her boyfriend, "He left [college] because he liked to party too much, and that wasn't like the place to do it." Participant 3912 discussed her reflections on the education of her family and what it meant:

Or seeing all my family also. No one has, like, a well-paying job. And, like, seeing ways everyone's alike, just, like, always being short on money or not being able to buy things that they wanna buy. That also just, like – I think, "What's the key, you know, to live a better life, or at least a little better?" And education, I think, is the answer.

Participant responses also included reflections on the decisions of others. Participant 9119 commented, "Some people are quick to make decisions and they need to change that."

Participant 3912 discussed her decision to attend college through reflections of others:

That's my biggest concern. I just don't wanna mess up because I've seen so many friends, so many family members, mess up because they didn't think about their decision. I've even seen my own mom do the same thing because they just don't think about every, little, single thing about what they're gonna do. And I've seen them, and then I'm just, like – I just don't want it to happen to me.

Two participants mentioned reflections on life in general that affected their choice to attend college or what to major in. For instance, Participant 9119 stated this about her sister:

She just has like- I just feel like if there are rich people and poor people, she's like a rich person, she's so snobby, and I just don't want to be that way, I don't want to be like, full of myself and stuck up, just bah. I know that sounds bad to say about your sister, but I just don't want to be like her, honestly. And that makes me not want to be a teacher.

Two participants also reflected on seeing the struggle of others and its influence on their career or college choice. While discussing her sister who did not go to college, Participant 9119 said of her sister's struggle, "Yeah, she did. She did work a lot. And um, long hours, long, long hours."

Participants mentioned reflecting on the experiences of family, parents, peers, teachers, significant others, people in general, and pastors when discussing the decision to attend college or what to major in. As mentioned in the quote above from Participant 9119 when reflecting on her sister or Participant 3912, family was mentioned by five of the eight participants. Parents were mentioned by six of the eight participants when discussing reflections like Participant 8711 who spoke to the influence her dad had in her

career interests. Five of the eight participants also mentioned peers in their reflections, such as Participant 9578, who said, “Because I have a friend that she loves art, she's painted ever since she was in middle school, she went to an art school for a little bit; it's a hobby, though. She can't see herself taking a class and having them tell her what to paint or what to do.” Three participants, when asked who influenced her college and career choices, stated teachers, as illustrated by Participant 3622:

Um, so like having that teacher who went here to kind of like – I guess in a way show me like what I could become from being an art major was kind of helpful and at the same time like I knew – like she absolutely loved this and like kept telling me stories about UNCG and everything and like her classes and the professors and all this stuff and I was just like, “You know what, I really think that's something that I wanna do.”

Other people mentioned by participants when discussing career and college choices included significant others, as mentioned by Participant 9119 in the above quote regarding her boyfriend partying in college; people in general as mentioned by Participant 9578, “I don't know, because all I heard was that people would say that college was hard, it was harder than high school, and I was like, ‘Okay, well, it can't be that bad’”; and pastor, as discussed by participant 4998, “My pastor, I shadowed bible study since I was little.”

Active comparisons. Participants actively compared the experiences of others in both their career/college decisions and their experiences around becoming undecided in college. In regards to the decision to go to college and career decisions, four of eight

participants endorsed active comparisons on topics such as the college decision process, high school, and struggle. These seven participants mentioned people such as peers, parents, family, and people in general when discussing the active comparisons. When discussing their experiences around becoming undecided, three participants mentioned active comparisons regarding the major choices of their peers.

When discussing the decision to attend college, four participants discussed comparing the actions of others and what they were doing. Participant 4998 stated, “Yeah, when I go up to people- oh wow, how did you decide on that? They are confident in what they want to do and why I am here.” Likewise, Participant 8711 compared the mindset of her high school peers when applying to college: “They had been gunning for schools since their freshmen year of high school and I was like, I don’t know what school I am going to.”

Participant 8711 later discussed talking with others about her high school experience and how it compared to her peers’ experiences: “When I went to college, talking to people about high school they were like, yeah, high school was all cliquey and stuff.” Finally, Participant 3912 compared the struggle of her sister to get an education and how it influenced her: “I didn’t get none of that because I was too young to remember, so I just went to school like any other person. But I did know my sister did need a little more help, and I, I, I think I matured faster that way too.”

When discussing the active comparisons participants conducted during their decision to attend college or their career choice, four participants mentioned peers in their responses, such as Participant 8711 when discussing her peers gunning for schools. Only Participant 4998 discussed people in general terms, as she did in the quote above. Likewise, Participant 3912 was the only participant to mention family members other than parents in her comparisons. Participant 9578 discussed comparing the action of her parents:

Everybody started talking about going to college, and I knew that I didn't just want to stay with a high school diploma. I wanted to get a job, get a career, not struggle like how my parents struggled financially, so I just knew I wanted to go to college, I wanted to get that degree.

In response to questions regarding the experience of becoming undecided in college, three participants discussed comparing the major choices of their peers. Participant 4998 stated, “Yeah, I mean some people know what they want to do, they go straight for it, to the end. But me, I am not really sure.” Participant 8711 also commented,

...and tons of things I want to do and they kind of taught me what not to do because I don't want to be that kind of person who like does this major they don't want to do and gets this job they don't want to do just to support their family that they might not even have because they are so busy doing all this other crap.

Social Persuasion

Participants in this study frequently spoke about receiving different forms of social persuasion from those around them. Social persuasion for the purposes of this study was defined as a specifically identified individual or group who gave directional feedback toward a specific outcome in response to actions or patterns of behavior by the participant. In many cases, this social persuasion was unsolicited. Three types of social persuasion were discussed by participants in regards to both research questions (i.e., the decision whether or not to attend college, career choices, and/or the experience around being undecided): advice, encouragement, and discouragement.

Advice. When discussing their experiences around college attendance and career choice, seven participants mentioned receiving advice in some form. Three participants discussed advice received for college. Participant 3912 discussed advice she received regarding the college attendance process: “Our counselor was, like, ‘Apply for FAFSA. They’ll help you pay for stuff,’ and I was just, like, ‘Oh,’ but I didn’t know how much they would help you pay and how much college actually costs.” Participant 9119 discussed how people at her work reacted when she discussed college:

It’s just like people and you’re like in my work, people were really like, it was really bad, just like the college thing, all the time, cause like Wake Forest was right there, so people were like “Why don’t you go to Wake Forest?” And all the Wake Forest kids would like come and be like “Don’t you want to come and be like them?”

When discussing career decisions, most participants mentioned career advice they received. Six participants discussed types of career advice. Participant 9578 discussed early career advice given to her by her parents, “My parents, they wanted me to get a good job, and they were like, ‘The medical field is your best way to go,’ so they sort of influenced me on that part, trying to find something in the medical field that could interest me.” Participant 5423 also discussed similar career advice from others: “Everyone has always told me – ‘you are good with kids and they like you, you know how to handle them and you know how to get a connection with them. So you should look into something with kids.’”

While discussing advice received for college or career, participants mentioned receiving this advice from parents, peers, counselors, and people in general. As mentioned in the quote above, only Participant 3912 mentioned a school counselor as having provided advice. Five participants mentioned receiving advice from parents, such as that mentioned by Participant 9578. Peers were mentioned by three participants, as reported by Participant 9119. People in general were mentioned by three of the participants, similar to the quote from Participant 5423.

Concerning the participants’ experiences around becoming undecided, six mentioned advice they received concerning careers and majors. Participant 6829 stated, “My mom said, ‘If you want an occupation or profession that you enjoy doing, picture yourself waking up to it and doing it every day and see, you know, will it make you

happy?’” Likewise, Participant 8711 received advice from her parents: “It comes up with my parents a lot because they don’t understand why I won’t declare a major. They are like, why are you waiting for it...just say you are one major or something, you know.”

Both of the previous quotes illustrate advice participants received from their parents during the experience of becoming undecided. A total of five participants received career/major advice from parents around the experience of becoming undecided. Three participants mentioned receiving advice from peers, such as Participant 3622, who stated, “And he was like, ‘I think you should like talk to a counselor about it and just – you know – see what they have to say.’” Three participants discussed people in general who gave them advice about career/major during the experience of becoming undecided. Participant 9119 received this advice: “Like everyone’s like ‘Oh, you’re fine, you can decide and then change it.’ And I’m like I could, but I don’t want to.”

Encouragement. During the college and career decision process, all eight participants discussed receiving encouragement. Encouragement took the form of encouragement for college, encouragement for career or major, and encouragement to stay close to home. Six participants discussed encouragement for college attendance, including Participant 8711 who stated, “I mean, probably my parents. You know, like I said, they kind of pushed me since I was younger to strive for something bigger so that’s kind of what pushed me towards it.” Participant 9119 echoed a similar sentiment: “My mom was always like ‘You’re gonna go to college.’ But she never told me the details.”

During the college attendance decision and the career making decision timeline, seven participants reported receiving encouragement for their chosen careers or majors. Participant 4998 commented, when asked who encouraged her, “And my pastor, he encourages me. When I told him what I wanted to major in, he was like, that fits your personality. You like to help people, go for it. So that helps me.” Participant 5423 discussed encouragement she received for one of her potential careers: “My teachers --- my family --- my family. I would babysit for my aunts in Siler and they would say ‘you are good at babysitting. The kids love you.’” Additionally, Participant 3622 discussed encouragement from her mom to pursue an art major: “She was just like, ‘I think, you know, if that’s what you wanna do then you should go for it.’”

Finally, four participants reported receiving encouragement to stay close to home when they attended college. Participant 6829 discussed a conversation her mom had with her: “I think it’s just the fact that when I applied to UNCG and I got in, my mom was just overly excited because she told me, ‘I wanted you to stay near the house, of course.’” Participant 3622 had a similar conversation with her mom: “My mom was talking to me about it and everything and obviously like it, it took a couple of months to decide if, what I was actually gonna do and she was like, ‘Well you know Greensboro is only like,’ it’s about 45 minutes away from my home town. So she was like, ‘You’re not gonna be that far away if you wanna come home.’”

Encouragement during the college decision and career decision phase was provided by a variety of sources. Participant 5423 exhibited two of these sources: family and teachers. Three participants mentioned family as the source of their encouragement and three participants listed teachers as the source for their encouragement. Only Participant 4998 mentioned her pastor or school counselor as a source of encouragement. Seven participants mentioned parents when discussing encouragement, such as Participant 3622 quoting encouragement from her mother as previously quoted. Four participants discussed receiving encouragement from their peers. For example, Participant 3912 commented when asked who influenced her to make the decision to go to college, “Um, my friends. My friends definitely influenced for me. Like, [friend’s name], she’s the one that influenced me the most, I think, to go to UNCG instead of GTCC. She’s the one that told me, ‘Look. Come here with me.’” Three participants mentioned people in general as providing encouragement similar to Participant 3912 who discussed encouragement for her college attendance: “I wasn’t really taking note – I just was hearing all the people say, ‘Yeah, they’re [Advanced Placement classes are] gonna be good for when you go to college,’ but I’m, like, I don’t even know if I’m going to college.”

Most of the participants reported experiencing and receiving encouragement for their major or career while being undecided about their major. Some, like Participant 9119 received encouragement for being undecided: “And I’m like well, I just want to make sure of what I’m doing, you know? But then there’s people like my boyfriend and

his family and they all went to college and so they're all like, 'You have plenty of time, don't worry about it.'" Participant 4998 spoke about her process while she was deciding what to major in:

Participant- Yeah, they ask me about what I want to do and I tell them about nursing and they'll just encourage you more. They'll say- that's a good thing to do. They're in need for nurses.

Interviewer- Have you shared with any of them your doubts about nursing and maybe not being able to make it?

Participant- Every time I do, they'll say – you can do it.

Participants received encouragement during the process of becoming undecided about their college major from significant others (such as the quote from participant 9119 about her boyfriend), from advisors, people in general, teachers, and parents. Participant 3622 was the only participant to mention her college advisor when discussing encouragement while undecided: "And she was like – so honestly she was like, 'I think if you really love painting then you should go with this one because honestly you're gonna get a blend of everything and it's gonna make you happier than if you like solely do graphic design because that's obviously not gonna make you happy.'" Participant 9119 was the only one to speak about encouragement from her boyfriend's mom: "So his mom's like 'Look at him, he doesn't, you know, like just go with whatever you feel.' It's just like, I don't know."

Discouragement. Negative social persuasion or discouragement was mentioned by six participants when it came to making the decision to attend college or when

participants were choosing their careers. In fact, five participants discussed moments when they received discouragement for college or their choice college. Participant 9119 discussed statements made by peers: “And it wasn’t like people were like ‘Oh you won’t go’ or whatever, but everyone was like ‘Why don’t you go to Wake Forest? Why don’t you go somewhere better, you know you’re not going to a good college, da da da.’” Some participants remember receiving discouragement from family, like Participant 9578:

Participant- I think my family probably, my aunts and uncles and cousins maybe, they definitely doubted me. They thought, because I've never been the kind I'll go out to trouble or anything like that because my parents have been strict with me, so they've done well with me. But my family thought that as soon as I got to college, I was just gonna be a mess, that I was gonna go party every day, that I was just gonna, I don't know, pick up bad habits, because their children, they never went to college. They're stuck with fighting for a job every day, so they don't like to see other people –

Interviewer- Succeed?

Participant- yeah, succeed, that's the word. So, they _____ they'd tell my parents, "You better keep an eye on her, because when she gets there, you never know. You won't be able to keep an eye on her there."

Four participants discussed discouragement while they were choosing their careers. Participant 4998 discussed not talking to her parents about her career due to past experiences: “I don’t talk to my parents that much because I probably won’t get any input from them.” Participant 9119 reflected on when she told her family about wanting to be a teacher:

Well, just my mom. Just like, every time I said I wanted to be a teacher, she said like “That’s not good enough, you know, you could do so much more.” And just like all the time, even my dad and my sisters are just like, even, my sister [name] is just like “You could do more, you could be more than a teacher.”

As illustrated above, discouragement came from various sources. Parents were mentioned by three of the participants and family was mentioned by three, similar to the comments above from Participants 9119 and 9578. Only Participant 9119 mentioned peers and only Participant 4998 mentioned teachers providing discouragement.

During the process of becoming undecided, five participants discussed discouragement for their major/career choice. This came in many different forms. Participant 5423 stated, “My roommates were like ‘you’re changing majors again?’ and I was like- yeah. They stuck with one the whole time, but I changed 3 times. So they are like, ‘you’re changing majors again!’” Participant 8711 discussed considering several majors: “And I also thought about being a studio art major but my parents weren’t for that so it was very hard.”

Physical/Emotional States

While discussing their experiences, participants’ responses reflected a variety of physical and emotional states. For this study, physical and emotional states were defined as how one felt while performing a task or during an experience, including emotional and somatic conditions. States that appeared in responses were categorized as positive,

negative, or ambivalent. These emotions were present during the decision to attend college, the career choice process, and the decision to become undecided.

During the college/career decision process, five participants made statements that reflected ambivalent emotions. Participant 3912 questioned her ability to go to college, stating, “It just made me feel uncertain.” Choosing a career for the first time also sparked ambivalent emotions in some participants. Participant 9578 discussed a time before choosing a potential career, “But, before deciding that, I was just confused. I didn't know what to do.”

Ambivalence was discussed by six participants during the decision to become undecided. Participant 4998 stated, “It’s like, if I don’t do that, I don’t have...the other majors I want to do, I am not sure.” Participant 9119 also stated, “I just, I’m very confused. I don’t want to settle on something, cause I feel like, cause I really don’t know about all the options out there, so I feel like every time I do kinda feel like ‘That’s what I want to do.’” Finally, Participant 3622 summed up her thoughts about what was difficult about being undecided by reflecting, “I think it’s difficult because you literally have the feeling of what am I gonna do with my life or you know like where do I go, what do I do?”

When it came to negative physical/emotional states, six participants endorsed negative states when discussing choosing a career or choosing to come to college. Concerning choosing a career, Participant 8711 stated, “It just makes me really

uncomfortable because because, like...I understand that money is important, like, I totally get that, I am not that wide-eyed girl who money is not [a concern].” Participant 9578 discussed feelings during the college application process: “I’d feel like you could say I felt dumb sometimes because I didn’t know how any of that worked, so sometimes I didn’t ask.” These negative emotions were also present for Participant 3912: “What am I supposed to do? And I was, like too shy, too intimidated, to go ask the counselors, so I was just, like, ‘What am I gonna do?’” Finally, Participant 6820 stated, “That’s when I kind of get, you know, anxious because when people ask me about important life decisions I always, like, read through a lot of research because, you know, of course it’s a life decision and whatnot. So I kind of get nervous and stuff like that.”

During the decision to become undecided, six participants discussed negative physical/emotional states. Participant 9119 reflected, “Being undecided is very difficult sometimes...Cause I really do feel useless.” While describing how she came to be undecided, Participant 6829 stated:

Because I was scared, to be honest. I was just kind of like nervous that if I declare myself Nursing and then on the application that I wouldn’t get in – or I think most likely Pre-Nursing. So I just said, “Undecided,” because I didn’t want to, like, put all my faith into Pre-Nursing and not get in and then just my hopes are, you know, gone.

Six participants reflected positive physical/emotional states when thinking about college or choosing a career. Participant 3622 discussed her experience visiting colleges and choosing her future career: “I walked into the art building and smelled the oil paint

and was sold.” Participant 9578 discussed her college application and decision process:

“In high school, I toured lots of campuses. I was getting excited.”

Outcome Expectations

During the interview process, participants often made statements that reflected expectations around the college and career choice process or around being undecided. For this study, outcome expectations were defined as beliefs about what outcomes would occur when an action is taken or task performed. Outcome expectations could be physical, social, or self-evaluative outcomes expectations; they also could include general expectations about life, self, or others. Participant responses often reflected positive, negative, uncertain, or ambiguous outcomes. Outcome expectations surrounded topics such as expectations around college, career expectations, expectations of self, expectations of others, expectations of decisions, and expectations of their major.

Expectations about college. When it came to making the decision to attend college, seven participants made statements that reflected their expectations of college. Six participant statements reflected uncertain outcome expectations surrounding college attendance. For example, Participant 4998 stated, “When I, before everything. I didn’t know what to expect, just seeing things from movies, and what people say”; and Participant 9119 reflected, “No one ever told me anything about what college was going to be like, so I didn’t know what to expect.” Four participants made statements reflecting positive expectations of college. Participant 9119 reflected, “I feel like college is gonna

open me up so much more and just help me figure out more about myself.” Four participants mentioned negative expectations of college including Participant 8711 who discussed thinking about college possibilities: “I was scared mostly that I would transfer there blindly and then hate it and want to transfer out. And people like, that’s frowned upon I think, if you keep transferring every time. So, that’s why I didn’t go there.” Four participants made statements that reflected ambiguous expectations surrounding college attendance similar to that of Participant 4998 when discussing what she expected from college: “Challenging. I mean it is also with the classes, but with GED classes it’s not as hard as if you go further but I expect more challenge with the classes I am taking.”

Career expectations. While discussing choosing a career, participants mentioned positive, negative, ambiguous, or uncertain expectations. Six participants mentioned career expectations while choosing a career. Four participants discussed positive career outcome expectations surrounding their chosen careers, including Participant 6829 when she discussed her expectations of the first career she was interested in: “But if I was a nurse then I can be temporarily his family member and care for him and whatnot because not all families can make it, you know, and be there for their loved ones during like a tragic time like that.” Three participants discussed negative career expectations when choosing a career, similar to Participant 9119: “It’s like at the same time I know I’m going to need [financially], like my family, we were never like, we never had any money, so, I just want to make sure my family has security.” Uncertain

outcome expectations around career were mentioned by three participants, including

Participant 9578 who stated:

Well, my one goal had always been being a doctor, but it's a lot of years, so I always had in mind, "What if something happened along the way, like I got married, or I just all of a sudden had a kid, and then I just can't continue studying, or I don't have enough money?" I don't just want to get right there in the middle and then have no career, have nothing I could work with.

Three participants mentioned ambiguous career outcome expectations when discussing choosing a career, similar to Participant 6829: "I'm not gonna stay with this four-year degree. I'm gonna keep studying,' but I was like I just wanted to come out of college with some type of job."

While making the decision to become undecided, four participants mentioned career expectations as part of their process. Four participants discussed uncertain career outcome expectations, similar to Participant 6829: "I just said, Undecided, because I know there's like many, many degrees out there like Public Health just that I can go into Nursing with and stuff like that. I just didn't want to declare myself because I didn't know if I was fully committed to nursing at that time." Two mentioned positive career expectations, including Participant 9578:

Well, the one I put a seven in, it talks about maybe obstacles that may exist in the field that I'm considering. That's what I think about a lot, and I think about the future, what may come up, and that's why I have these three careers in mind – nutrition – and, if I want to keep studying two years to be a PA, and then, if I have time, then I could go into med school, so I thought about the obstacles. I mean, if I'm trying to get a job in the

medical field, it's more likely that I would get a job than if I studied in another area. But that's why I put a seven, because I always think about what may happen if I chose this career.

Participant 3622 was the only participant to discuss negative career outcome expectations during the decision to become undecided:

Um, obviously like job security is one thing or like just how many jobs you can even have. Um, obviously with a painting major there's not that many. Um, it's kind of more of a major that you would have to incorporate into other things I think for the most part, which is fine with me. Um, but that's definitely like one of the main things I thought about and also I thought about like well how happy am I gonna be with this major because I know it sounds terrible, but I don't wanna go through four years of not completely loving what I'm learning or doing, or you know, having a job where I'm like, you know, sitting at a desk and just miserable, like I wanna be like happy about whatever I decide to do with my life.

Expectations of major. While making the decision to attend college or deciding their career, six participants in this study discussed outcome expectations surrounding their college major. These expectations took the form of positive, negative, ambiguous, or uncertain outcome expectations. Five participants discussed uncertain outcome expectations concerning their college major when it came to the college attendance or career decision. Participant 8711 discussed being uncertain about the time and commitment needed for the first major she wanted to pursue: "I wasn't sure of it too because it was a big commitment. Studio arts is a big commitment and I don't know if I can put in" Participant 4998 echoed the same sentiment after she chose her first major: "So, since nursing is what I wanted to do, it's like see how far I can go." Later,

Participant 4998 also was one of two participants to discuss positive aspects of her first chosen career: “It benefits people and myself.” Participant 9119 was one of two participants who discussed negative expectations concerning majors they were considering for their chosen career: “I’ve been thinking about counseling too and it’s like, I don’t know if I want to go to get my master’s, so I’m not sure if it’s the right choice for me. Cause I don’t want to get a psychology major cause there’s not much you can do with it. With just a you know, a bachelors.” Finally, Participant 3622 made the following statement about choosing a major/career:

I think like whatever it was talking about, um, knowing your interests and then like being suited for an occupation, like I think that’s really important for whatever major you’re doing, um, because like if you’re not interested in your major then you’re probably not interested in whatever occupational field you wanna go into and I know some people, you know, have different reasons for being in whatever major they’re in.

When it came to discussing the experience around becoming undecided, seven participants in this study discussed expectations surrounding their majors. These seven participants all mentioned uncertain outcome expectations concerning their college majors. Participant 5423 commented, “Well like I said after nursing, I was like, what are you going to do? I came in here so positive, that I was like, nursing, yeah, I’m going to finish out nursing. But then, it was like what am I going to do now? Where do I go?”

Participant 9119 stated:

I really don’t know what the future holds. Like I know I want to be um, like have a family and all that, but I don’t know where I’m gonna live or

uh, I don't know what kind of person I might be, cause I might change, you know? I don't know what I'm gonna be like in a few years. I could have a completely different perspective on life and um, you know, wanna be a construction worker. (both laugh) And so, I don't know what, I just don't know, cause I'm just so worried that if I do decide now that I will change my mind and then I'll be stuck in a career or something that I'm not happy with, and, so that's why it is difficult for me to commit to one and just go with it.

Expectations of self. While discussing the decision to become undecided regarding their college major, six participants mentioned expectations of self. These expectations reflected a variety of positive, negative, ambiguous, and uncertain outcome expectations that the participants held about themselves. While making the decision to be undecided, Participant 8711 remembered her thought process regarding what she expected: "I just didn't want to be the person who changed their majors like 50 times." Participant 9119 stated her impressions on what she should be doing: "I just feel like, I should know, that's what I feel like. I should know what I want to do already." Participant 3912 discussed her feelings since becoming undecided about her major and also discussed her expectations of her actions that led her to the change: "It's been great. I was reflecting about it, um, these last couple weeks, and I'm, like, I don't know what – where I would be if I didn't go to college this year. Like, I know if this semester would've been the same as last semester, I think I would've dropped out."

Expectations of decisions. Six participants in this study discussed their expectations of their decisions during the experience of becoming undecided about their college major; these expectations included their thoughts about the outcomes of their

choices. These thoughts reflected positive, negative, ambiguous, and uncertain outcome expectations during the experience of becoming undecided. Several participants discussed the possible implications of being undecided or changing their minds, such as Participant 8711: “So it’s like that is the hardest thing- like not knowing you are wasting your time taking these classes or not. Because I don’t want to end up with like 20 electives because I decided to drop business because I didn’t like it, you know?” Participant 9119 stated this about making a decision she wasn’t ready for: “I feel like if I just did try to settle on a major, and then change it, I would not change it. I would just stick with it and then I wouldn’t be happy.” Finally, the statement from Participant 4999 reflected on the variety of majors available to her: “There are lots of possibilities. Like I said, I am not sure which one is for me.”

Expectations of others. Finally, four participants discussed their expectations of others while making the decision to be undecided. While discussing her experiences and thoughts around being undecided, Participant 8711 stated of other first-year students, “I am sure 75% of those people were going to change their majors.” Participant 9119 echoed this thought: “Everyone I know knows what they want to do, at least they say they do right now. They’ll probably change, you know?”

Messages

All eight participants discussed messages they received during the decision to attend college, their career/major decisions, or during the experience of becoming

undecided about their college major. Messages were defined as implicit or explicit messages/beliefs spoken about in collective terms by the participant, meaning the participant holds this as a message they believe is commonly held in their family, culture, or group. Messages were not necessarily values held by the participant, but messages communicated to the participant. Messages differed from social persuasion as messages are not meant to direct the participant toward a certain action; rather, they were “absolute truths” in the eyes of the participant or ways of group/family behavior observed or communicated to the participant. Messages followed topics such as work, education, collectivism, gendered messages about work, and cultural stigma around being undecided about your college major. Messages were usually received by participants from family or the culture around them. All eight participants reported receiving messages while making the decision to attend college or choosing their career/major and only two participants reported receiving messages during the experience of becoming undecided.

Work. Seven of the eight participants mentioned messages they received about work while making the decision to attend college or while deciding their career. Statements like that of Participant 4998 - “For them it’s a now kind of thing where you have to work to get stuff now so to further your education ...” - reflected the message her parents sent about furthering her education post-high school. Participant 3912 discussed implicit cultural messages she received about work: “Everyone that lived, like, around us were Hispanic, so the main jobs they were doing, like, construction, factories, I think house cleaning things, um, restaurants, like, you know, lower income kinda jobs.”

Participant 9578 felt that her parents guided her in a career direction through their statements: "I've always wanted to be a doctor. My parents sort of pushed me for that. They were like, 'We want you to be the best you can be. We want you to not suffer like we did and we want you to have a nice, stable job.'"

Education. Participants also discussed messages they received about education while making the decision to attend college or the career they chose to pursue.

Participant 3622 discussed the culture of college education that surrounded her in high school: "I mean it's just like, it's something people do, you know, just like, 'Oh I graduate high school and I go to college.'" Statements like those from Participant 6829 also reflected this:

So I wanted to go to college, of course, but my mom also – actually, both my parents – instilled in me that, you know, if you want to do something with your life you just can't have a high school degree. You have to have a secondary education, whatever you want to do. It doesn't really matter. Nowadays you have to have like a secondary degree but, of course, back then also you needed a secondary degree.

Collectivism. Other messages discussed by the participants in this study include statements about collectivism. Two participants discussed messages reflecting collectivism they received. Statements like those from Participant 4998 reflected these messages of collectivism in the culture where she grew up:

Participant- For work, you work for each other, like the community, one day they will work for you and the next day you work for them. It's pretty much not that much money involved unless you plant the food and then go sell.

Interviewer- So everyone in the community kind of helps each other out.

Participant- Yeah, that's their type of payment.

Gendered messages about work. Two participants discussed gendered messages they received growing up around work. Participant 8711 discussed the cultural messages she received growing up surrounding what work men and women can do:

Even though it's industrial, like we have night markets and stuff like that. And those are always run by women. Those are the kind of jobs women can get. It's not even a job. It depends on how many people buy your fruit or your food you are making. So, a lot of women make traditional Malaysia food to try to make money for their family and stuff while the men are doing actual jobs. Like a lot of them...men can get any jobs they want, like business men. Even the schools, most of the schools there are, there are more men students than there are women students so the majority of them are like business.

Drive. Finally, one participant discussed messages concerning drive. Participant 6829 discussed messages she received from family about the need to be driven:

She's trying to mold us into, you know, whatever you want in life, go get it but work for it. Yeah, because it doesn't – you know, it doesn't come free, of course, and especially in this economy nothing, especially going to groceries for \$100.00 isn't really anything anymore and stuff like that. So they're very driven.

They're very like – they're not materialistic in a way, but if they want something, you know, they'll work for it because...

Source of messages. In total, six participants reported receiving messages about college attendance or choosing a career through their families, like those from

Participants 6829, 9578, and 4998 above. Five participants reported receiving messages from their surrounding culture, like those from Participants 8711, 4998, 3622, and 3912.

College stigma against undecided. Two participants in this study openly discussed feeling a stigma against being undecided about their major in college while they were going through the experience of being undecided. Both participants also mentioned receiving this message from the surrounding culture. Participant 9119 stated, “It seems like everyone’s disappointed almost or something. It seems like a negative thing honestly when I say it and then people their reaction is usually negative.” Participant 8711 discussed it this way: “Like, I didn’t realize but there is a stigma against being undecided. Like, I felt it when I was here at SOAR. Like there was only 3 undecided people, yeah, out of my whole SOAR.”

Decision Making Styles/Cognitions

During the interview process, participants were asked questions surrounding their experiences on choosing to come to college, choosing a career, and their experiences while choosing to be undecided about their college major. Participants’ answers often included discussing their thoughts during the decision making process, their mental steps during the decision making process, and reflections on their decision making style, which were included in the decision making styles/cognitions domain. Categories of decision making styles/cognitions included personal/relational, educated/rational, personality, questioning choice, forced choice, too many choices, and decision final.

Personal/relational styles included values-based decision making, intuitive decision making, preference-based decisions, and dependent decision making. Educated/rational decision making style reflected decisions that were made through researching options, asking questions, thoroughly analyzing information, and weighing the pros and cons of the options available. Personality-based decision making style/cognitions reflected decisions that were based on the personality of the participant and included participants discussing procrastination, wanting to keep their options open, and trying to be independent.

Personal/relational. During the decision to attend college and the career choice process, all eight participants mentioned personal/relational decision making styles or exhibited these cognitions. All eight participants discussed intuitive decision making styles and cognitions as part of their process for deciding to attend college or choosing a career. Participant 3912 mentioned intuitive decision making while choosing what college to attend: “It was just, like, ‘I’m just gonna go for that.’ But it just followed – I think at the end I did follow my heart. I just really wanted to come here.” Participant 3622 discussed similar cognitions and style:

Yeah, I – I didn’t really go visit any other places because this was kinda one that I was like, “I think I wanna go here more than anything.” Um, I did look at some of their stuff on-line because I had thought about going to a college in New York and everything, and then I was like that’s – I think that’s too far, not really what I wanna do. I walked into the art building and smelled the oil paint and was sold.

Six participants discussed preference-based personal/relational decision making and cognitions when choosing to attend college or choosing their career. Participant 4998 stated, "I like to do hands-on things. It's like getting works done, helping, making the bed, seeing progress." Other participants discussed preferences for the college they wanted to attend, such as Participant 6829, who said, "I applied to others, but the main one I wanted to get into was UNCG." Four participants discussed values-based personal/relational decision making when choosing to attend college or choosing their career. Participant 9578 discussed this when making the decision to pursue being a physician's assistant: "So, I like to help people and I like to travel, and I like the medical field, so that's why I said, 'Okay, that seems interesting,' but I don't know how many years that is, where do I go, how does that work." Four participants discussed dependent personal/relational decision making styles and cognitions when choosing to attend college or choosing their career. Participant 8711 stated, "And the thing is, my best friend is there and like all my friends from high school go there and my best friend is there and I am like why don't I want to go to this school?"

When discussing the experience of becoming undecided about their college major, six participants discussed personal/relational decision making styles and cognitions. Two participants discussed values-based cognitions and decision making. Participant 9119 stated, "I know I won't make a lot of money, so it's kinda like ohhh, so many things to balance out and I just wish there was a mix of everything I wanted to do and then with the right pay (laughs)." Three participants discussed preference in their

decision making cognitions when becoming undecided. Participant 3912 discussed her thought process:

I also found that I wanted to help, and nursing was a good way to help. It was a stable job. Um, it was just something that was, like – I mean for my mom it was accepting that it was, like, well known, something that was, like, prestigious at some point, but it's something that I don't wanna do anymore. You know? I don't know – wanna do it anymore. I just remember that even – ever since I was young, I wanted to be a nurse.

Finally, three participants discussed intuitive cognitions and decisions during the experience of becoming undecided about their college major. Participant 5423 stated the following:

But I need to see what I'm going to do first. It is hard too. You have so many choices to choose from. It's like what am I going to do? All the choices you have to really think about what are you going to do. What you are going to have fun doing throughout your whole life. What you are going to enjoy and not be like oh, I hate this job. Is it something you are going to enjoy? So with all the different options, you have to choose one so it's really hard.

Educated/rational. When making the decision to attend college, all eight participants discussed educated/rational decision making styles and cognitions.

Participant 4998 used this type of decision making style when choosing which college to attend: “It was this and UNC Charlotte cause one of my sisters lives in Charlotte now so it was either live here or there and I chose here because I am very involved in my church. I didn't want to leave that. My sister lives in Charlotte so if I go there it would be fine.”

Participant 5423 stated, “I'm really organized. I'm really, om, I am really, I have to see

stuff written down. I have to see it in front of me to work through it. I have to see the pros and cons of everything to see how that will work out later in the future.” When thinking about choosing a career, Participant 9119 thought, “There’s just so many, I wish I had a list of every single job and I could just like, you know, like process of elimination.”

During the experience of becoming undecided about their college major, seven participants discussed educated/rational cognitions and decision making styles. Participant 3912 recounted her experiences: “I just decide, and I just, like – I just think about every possibility, everything before I make a decision, and then it just takes me forever to make up my mind. And I can just go – I can’t just, like, go for it. I just always, like, think about every little, single thing.” Participant 6829 stated of her decision, “Yeah, for me, because I don’t want to feel like, ‘Oh, it’s stressful. Oh, I gotta complete this, this and this.’ I just wanted to, you know, go to college and see what my options are and then from that pick the two that I really wanted and from those two the one that I can see myself working in.” When choosing to be undecided, Participant 8711 stated, “Yeah, I definitely know what I don’t want to do, but I don’t know what I want to do so, it’s like I have to...process of elimination. I have to try everything and just cancel them out.”

Personality. When discussing the choice to attend college or their career choice process, the responses of four participants seemed to reflect personality-based decision making styles and cognitions. Participant 3622 discussed this as follows:

Um, and so I'm the first child in my family actually to go to college. Um, so I think in a way like that was more motivation for me because I was like – like I'm an achiever, like I like making people happy and like doing things and like being able to say, like, "I've done this," and everything. So I guess in a way that was part of the reason too because I was like, "Now I'm gonna be the first person in my family to go to college and get a degree," and like all this stuff which I'd always wanted to go to college anyway.

During the experience of becoming undecided about their college major, five participants discussed their decision making styles and cognitions in a way that reflected personality based decisions. Participant 3912 was one of five participants who discussed running out of time or procrastination when she stated, "It's just not knowing what classes to take. I think that's, that's one of the problems for me right, just, like, what classes am I supposed to take, you know? Like, I don't wanna waste my time with classes." Participant 6829 stated. "So I just didn't really like know what my future – I just wanted to focus on the present at that time and deal with that and, you know, figure out my future later. But then coming here, it kind of molded me into either Public Health or Nursing, but then Nursing was always my goal. So that's the goal that I'm trying to get into, but yeah." Participant 8711 was one of three to discuss wanting to keep their options open when they were going through the experience of becoming undecided:

I just like knowing I have options and that I am not boxed into one occupation forever. I like, I don't know ...that's what I like about political science and economics. It's so... You can apply it to so many things, you know? And, it's so interesting, like I think that's why I could never be a Biology major. It's cause, being a Biology major, there's not many paths you can take. You know? You can be a dentist, a doctor, a

pharmacist, I guess. Or you can work in a lab. That's it. And that's great for people who love that stuff but it's just not me.

Finally, Participant 9578 was the only participant to discuss her process of becoming undecided as an independent choice:

I know what field, I just wasn't sure what area exactly. I don't think being undecided is a sign of weakness. I mean at one point, I did think of it, you know, "Oh no, I'm gonna change my major. What are people gonna think?" but then I'm like, "Well, I can't just base my decision off of what others are gonna think." I don't think it's a sign of weakness anymore. I just think it's a sign of just choices you have to make in life.

Other decision making styles/cognitions. When discussing the decision to come to college, what career to pursue, or the experience of becoming undecided about their college major, participants discussed thoughts and processes that did not fit into a single category. When discussing the choice to attend college, Participant 8711 mentioned questioning her choices: "And the thing is, my best friend is there and like all my friends from high school go there and my best friend is there and I am like why don't I want to go to this school?" Participant 9119 discussed the experience of a forced choice to go to college, "So it wasn't a really like a choice at all, really, it seems like choosing was a choice."

When discussing the experience of becoming undecided, Participant 9119 was one of three to discuss the finality of her decisions as a thought during the undecided experience: "I want to decide and just be done with it, I'm not that kind of person that- if

I make a decision, I have to be done with it. That's why I haven't made one yet." Two participants mentioned feeling that there were too many choices, like Participant 9119 who stated, "And then, 26: 'I'm not very certain about the kind of work that I'd like to do.' Cause even though I know I want to help people, there are so many ways to help people that I don't know exactly what I want to do because there are so many options that when I do what I do, I probably don't even know about yet. So, I don't know."

Participant 9119 was also the only participant to mention feeling that she needed goals during the experience of becoming undecided about her college major: "I think my problem with myself right now is I don't have any specific goals. Because the only goal I have right now is to figure out what I want to do."

Values

During the interview process, participants mentioned important beliefs or things they considered important during their experiences and decision processes. These beliefs were defined as the domain *values* and were related in the interview questions surrounding college attendance/career choice process and the experience of becoming undecided. Four total categories under values emerged: happiness in career, helping, financial/job stability, and variant life values such as family and not wasting time.

Happiness in career. Five participants mentioned the value of happiness in career when discussing choosing a future career. Participant 6829 discussed this by stating, "Of course, money is like a financial staple in everyone's life, but it doesn't really

dictate my life. I just want to be happy doing what I wanted to do in life. And that's what my mom wanted for me and that's what I want for myself also." Participant 8711 stated, "I want to make sure the career I have is the career I want, not just a job that I have to do because I am 27 and I need a job."

Helping. When discussing choosing a career, five participants mentioned the value of helping as something that drives or drove their career decisions. For example, Participant 9119 stated of her career expectations, "Just helping people, I really want to do a job, I want to have a job where I work with people, you know, and help people, make a difference. I don't just want to just do a job that, isn't you know, productive in society." Likewise, Participant 6829 recounted wanting to help and be of assistance to others in her first chosen career of nursing: "But if I was a nurse then I can be temporarily his family member and care for him and whatnot because not all families can make it, you know, and be there for their loved ones during like a tragic time like that."

Financial/job stability. The value of a career that provided financial and/or job stability was mentioned by three of the participants in this study when choosing a potential career. When she made her first career choice, Participant 9578 recounted considering a career based on the value of job/financial stability: "They earn good enough money. I like what they earn. It looks like a stable job. It looks like I could find a job somewhere, like I get to meet people, and maybe there's someone that doesn't speak English, I could help out with that, and I could just help with patients." Participant 3912

echoed this when discussing her first chosen profession of nursing: “I wanted to be a nurse ever since – ‘cause it was just, like, a well-paying job and – it was something that I thought I wanted to do. I thought [*chuckle*] but not anymore.”

Variant life values. During the interview process, participants mentioned other life values while discussing the decision to attend college, their career decisions, and the experience of becoming undecided about their college majors. Three of the participants spoke of the importance of considering their families, current and future, when making the decision to attend college or choosing a career. Participant 6829 echoed this when she stated, “I just think that, regardless of what I’m doing with my life and with my siblings and my cousins or whatever, like we should always think back to, you know, our parents and their struggles.” Participant 9119 discussed things she considered and expected when choosing a career: “I want to be able to like, have a family eventually you know.” Two participants discussed the value of not wanting to waste time while they were becoming undecided about their major. Participant 9119 discussed this as part of her experience becoming undecided: “And I don’t want to waste my time because it’s not- it’s not like it’s free money, I have to pay off all this debt.”

Self-Efficacy

During the interview process, many participants spoke about their self-efficacy towards different tasks needed to attend college, choose a career, or to choose a major/become undecided. Self-efficacy was defined as a person’s belief in his/her ability

to perform a given task (Bandura, 1986). Participants in this study related high, low, and uncertain beliefs about their self-efficacy for related tasks.

High self-efficacy. When discussing the choice to attend college and choosing a career, six participants discussed having high self-efficacy for the tasks they associated with these choices. Participants mentioned high self-efficacy related to tasks such as self-awareness, ability to make career decisions, maturity, ability, college attendance, information gathering, and overcoming barriers. Participant 6829 made the following statement about her choice to attend a four-year college: “But I felt like if I can handle GTCC then maybe I can handle UNCG and I have, you know, taken like five or six classes there. I’m pretty sure that I could handle UNCG, so that’s why.” Regarding self-awareness, participant 5423 stated, “I know myself. I know what I want. I know where I want to get. I know what I want in life – getting there is another thing. I know what I want! Yeah!” Participant 9578 recounted a discussion with her mom about her ability to stay in college if she went: “I was like, ‘Ah, that’s okay, mom. I know how I am. You guys trust me. I’m not gonna go do all that stuff that they say ’”

When discussing the experience of becoming undecided about their college major, only two participants discussed high self-efficacy. When discussing her indecision, Participant 9119 stated of her high self-efficacy for science coursework: “Like if, I feel like if I really put my mind to it, I could be good at science and things that and the things that I needed to do to get a nursing degree and now, but at the same time, it’s

like, I don't know if I will." After taking the Commitment to Career Choices Scale (CCCS), Participant 3912 discussed her thoughts while becoming undecided about her college major and whether there was one career that was right for her based on her abilities: "Then I think, so – and then at the same time, I do think so. That's why I was just, like, like, "Okay, I could do different things, but I think I would be better at doing these things,"

Low self-efficacy. When discussing the college attendance process and the career choice process, only two participants discussed low self-efficacy with the tasks they associated with these decisions. Participant 6829 reflected on her educational and career decisions: "That's what I was thinking about when I was doing this, but then I also like asked myself about life decisions. Am I like that mature adult? I don't think I'm that mature." Participant 8711 stated while discussing the college attendance process, "I am not like good...I don't know how to say this, I am not like super smart, but I know how to like, how to do things, you know?"

When discussing the experience of becoming undecided, six participants discussed low self-efficacy surrounding the tasks they associated with this process. Participants mentioned low self-efficacy concerning their intelligence, their first chosen major, self-awareness, and their ability to make career decisions. When asked what led her to feel undecided, Participant 4998 reflected on questioning her ability by stating, "If

I can actually do well...yeah, do well in the classes, that's the reason." Participant 3912 reflected the following around her CCCS answers:

The one that I was, um, the one that says, "I worry about my ability to make effective educational and career decisions," is because, like, that's the problem I'm having right now –because I don't know what to choose. There's so many options, so many possibilities, and I'm just, like – I just can't. I just, I just – um, sometimes that's why I think that's my problem because I feel like I'm more of a follower than a leader because I feel like sometimes I just need someone to tell me what to do instead of me deciding by myself. So I think that's one of my biggest struggles.

Uncertain self-efficacy. Participants discussed uncertainty about their self-efficacy when discussing the experience of becoming undecided about their college major. Participant 6829 described how uncertain she was about her abilities: "Do I really know myself, like am I really ready, you know, for the occupation? Because when I was completing this I was asking myself, 'Do I really know myself? Do I really like – can I really do it? Can I really be in the nursing field, committing myself solely on the nursing field?'" Participant 4998 described her uncertain self-efficacy around her confidence and commitment: "Feeling confident in my abilities. If I commit to the career plan that will work out."

Reason for Participation

As part of the interview process, participants were asked to disclose the reason they decided to participate in the research study. This domain was labeled *Reason for Participation*. Results are presented in Table 12.

Table 12. Participant Reasons for Participation

Reason for Participation				
Category	Subcategory	Core Idea	Participants Endorsed	Label
			4998, 8711, 9578, 3912	Variant
Help Self				
			4998, 9119, 5423, 3622	Variant
Help Researcher				
			9119, 6829, 5423, 9578	Variant
Help Others				
Friends				
			3622, 9578	Variant
Persuaded				
			9119, 3622	Variant
Fun				

Four participants endorsed the idea that the study would help themselves.

Participant 3912 stated she participated because “I knew it was gonna be good, and, um, just because, because it was something that I was dealing with right now, and I just feel like maybe it would help me out, understand some of my struggles.” Four participants stated they participated in an effort to help the researcher. Participant 5423 participated because “Like I’ve said, I’ve always liked to help people so if it’s helping you, I’m like (laughter) I am a helper.” Four participants stated they participated in the study to help others, such as Participant 6829:

Because I feel like, you know, someone is going through what I went through – you know, being a freshman, first-time college student and not knowing who to go to in life. So, you know, if they hear this interview or they see it or they read it then hopefully they can have like a peace of mind to it and, like, not overthink it, not over-worry and know that, you know, UNCG is a very family-oriented college. You know, you have the

support of your advisors and your teachers and colleagues and family to push you to wherever you want to be in life. Yeah.

Two participants stated they participated because friends persuaded them to be part of the study. Participant 9578 related how a friend contacted her and convinced her to be part of the study:

Well, when my friend, she texted me, she told me, "Hey, you're a first-generation college student and you did re-think your major at some point," and I was like, "Yeah, why?" and she was like, "Well, I know someone that would be – " she explained the whole thing, and she was like, "I can give her your e-mail," and then she said, "They'll give you a gift card for participating, as well." But the two things she mentioned, I was like, "Oh, well, that's me right there. No one else has gone to college in my family, and I did reconsider my major," and then I got the e-mail. I read it and I was like, "I'm not usually a person that goes out and talks to anyone because I'm just shy," but I was like, "I could do this. It helps other people out, and it helps me, too."

Two participants mentioned they thought participating in the research study would be fun. Participant 9119 stated she participated because she felt studies were fun: "Yeah, and I just, I don't know, I think studies are fun (laughs)."

Commitment to Career Choices Scale

During the interview process, participants were asked to take the Commitment to Career Choices scale to introduce participants to the concepts and language used to discuss career commitment, exploration, and foreclosure. Results from the analysis of Cronbach's alphas for the CCCS indicated the total reliability alpha for the scale was adequate at .87 with eight participants. When the VEC and TTF scales were analyzed,

Cronbach's alpha coefficient of the VEC was observed at .93 indicating high internal consistency, but the alpha observed for the TTF was .81, indicating adequate internal consistency of this scale with the participants in this study.

Table 13. Descriptive Statistics and Reliability (Cronbach's Alpha) for VEC and TTF in Total Sample

Population	<i>N</i>	Scale	Range	Mean	<i>SD</i>	Alpha
Total	8	VEC	43-90	64.38	21.13	.93
		TTF	16-44	33.75	9.42	.81

Further examination of the statistics above indicate that the total sample had average VEC scores), indicating moderate levels of commitment to career choices and moderate levels of career exploration activities. TTF scores were slightly above average, indicating tendency to foreclose on career options or choosing a career before an in depth search. When analyzing the CCCS results, one participant's scores (Participant 8711) appeared considerably different than the scores of other FGCS in this study. It is important to note that this participant was the only participant who entered college undecided, whose parents had attended technical or community college, and who lived in two other countries before moving to the United States in high school. This participant's scored 90 on the VEC indicating a difficulty in making career decisions and possibly a lack of knowledge in how to make these decisions, however her TTF scores were low at

16 indicating a lack of career foreclosure activity. Results from the CCCS should be interpreted with caution given the low number of participants in this study.

Summary

In summary, the research team found several categories and subcategories to be general and typical of the first-generation college student experience around choosing to attend college, choosing a career, and becoming undecided about their college major. *General* categories were those endorsed by 7-8 participants in the study. *Typical* refers to categories that 5-6 participants endorsed, and *variant* refers to categories 1-4 participants in this study endorsed. Due to the number of categories and subcategories found to be general and typical, the findings will be summarized by research question.

In response to the first research question regarding the experiences and expectations of FYFGCS who are undecided around choosing to come to college and choosing a career, participants endorsed seven categories and eight subcategories as general. Ten categories and thirty-one subcategories were found to be typical. Participants endorsed three categories and fifty-eight subcategories as variant. In response to the second research question regarding the experiences and expectations of FYFGCS around becoming undecided about their college major, participants endorsed two categories and four subcategories as general. Participants in this study endorsed five categories and ten subcategories as typical. Finally, participants endorsed nine categories

and forty-eight subcategories as variant. Table 14 lists the categories and subcategories per question that were found to be general or typical.

Table 14. Categories and Subcategory Labels by Question

What are the experiences and expectations of first-year, first-generation college students who are undecided about their college major around choosing to come to college and choosing a career?	
General	Typical
Personal experiences High School	Personal experiences High School: Active Social Support for Career /College
Personal experiences High School: Happenstance Opportunities for Career/College	Personal experiences High School: Active Steps Toward College or Career
Personal experiences High School: Happenstance Social Support	Personal experiences High School: Lack of Support for Career/College
Personal experiences High School: Provided by Family	Personal experiences High School: Provided by Peers
Vicarious Experience Reflections	Personal experiences High School: Provided by Teachers
Vicarious Experience Reflections: Career Social Persuasion Advice	Personal experiences High School: Provided by High School Counselor
Social Persuasion Encouragement	Personal experiences Childhood
Social Persuasion Encouragement: Encouragement for Major/Career	Personal experiences Childhood: Provided by Family
Social Persuasion Encouragement: Provided by Parents	Vicarious Experiences Reflections: Education
Outcome Expectations About College	Vicarious Experiences Reflections: Provided by Family Members (non-parent)
Messages: Work	Vicarious Experiences Reflections: Provided by Parent
	Vicarious Experiences Reflections: Provided by Peers

Decision Making Cognitions
 Personal/Relational
 Decision Making Cognitions
 Personal/Relational: Intuitive
 Decision Making Cognitions
 Educated/Rational

Social Persuasion Advice: Advice for Career
 Social Persuasion Advice: Provided by Parents
 Social Persuasion Encouragement:
 Encouragement For College
 Social Persuasion Discouragement
 Social Persuasion Discouragement:
 Discouragement for College
 Physical Emotional State Ambivalent
 Physical Emotional State Positive
 Physical Emotional State Negative
 Outcome Expectations About College:
 Uncertain Outcome Expectations
 Outcome Expectations of Career
 Outcome Expectations of Major
 Outcome Expectations of Major: Uncertain
 Outcome Expectations
 Messages: Education
 Messages: Source of Messages-Family
 Messages: Source of Messages-Cultural
 Messages
 Decision Making Styles/Cognitions
 Personal/Relational: Preference
 Values: Happiness in Career
 Values: Helping
 High Self-Efficacy

What are the experiences and expectations of first-year, first-generation college students around becoming undecided about their major in college?

General	Typical
Personal experiences College Personal experiences College: Active Decision Making	Personal experiences College: Happenstance/Forced Decision Making Personal experiences College: Seeking Support for Career/College

Personal experiences College: Seeking Career Opportunities and Information	Personal experiences College: Happenstance Social Support for Career/College
Social Persuasion Encouragement: Encouragement for Major/Career	Personal experiences College: Happenstance Adjustment and Independence
Outcome Expectations of Major: Uncertain Outcome Expectations Decision Making Cognitions Educated/Rational	Social Persuasion Advice: Advice for Career Social Persuasion Advice: Advice Provided by Parents Social Persuasion Discouragement: Discouragement for Career Physical/Emotional States Ambivalent Physical/Emotional States Negative Outcome Expectations: Expectations of Self Outcome Expectations: Expectations of Decisions Decision Making Styles/Cognitions Personal/Relational Decision Making Style Personality Decision Making Style Personality: Run Out of Time/Procrastinate Low Self-Efficacy

Upon reviewing the domains, categories, and subcategories, there are overlapping domains, categories, and subcategories between Research Question 1 and Research Question 2. The following table presents the categories and subcategories endorsed by participants as general or typical once the data from both research questions were combined. By combining the data, fifteen categories and twelve subcategories were endorsed as general. Eleven categories and twenty-seven subcategories were endorsed as typical.

Table 15. Combined Category and Subcategory Labels for RQ1 and RQ2

General	Typical
Personal experiences High School	Personal experiences High School: Active Social Support for Career /College
Personal experiences High School: Happenstance Opportunities for Career/College	Personal experiences High School: Active Steps Toward College or Career in High School
Personal experiences High School: Happenstance Social Support	Learning Experience High School: Lack of Support for Career/College
Personal experiences High School: Provided by Family	Personal experiences High School: Provided by Peers
Learning Experience College	Personal experiences High School: Provided by Teachers
Personal experiences College: Active Decision Making	Personal experiences High School: Provided by High School Counselor
Personal experiences College: Seeking Career Opportunities and Information	Personal experiences College: Happenstance/Forced Decision Making
Vicarious Experience Reflections	Personal experiences College: Seeking Support for Career/College
Vicarious Experience Reflections: Career	Personal experiences College: Happenstance Social Support for Career/College
Vicarious Experience Active Comparison	Personal experiences College: Happenstance Adjustment and Independence
Social Persuasion Advice	Personal experiences Childhood
Social Persuasion Encouragement	Personal experiences Childhood: Provided by Family
Social Persuasion Encouragement: Encouragement for Major/Career	Vicarious Experience Reflections: Education

General	Typical
Social Persuasion Encouragement: Provided by Parents	Vicarious Experience Reflections: Provided by Family
Social Persuasion Discouragement	Vicarious Experience Reflections: Provided by Parent
Physical/Emotional States Ambivalent	Vicarious Experience Reflections: Provided by Peers
Outcome Expectations About College	Vicarious Experience Active Comparison: Provided by Peers
Outcome Expectations of Major	Social Persuasion Advice: Advice For Career
Outcome Expectations of Major: Uncertain Outcome Expectations	Social Persuasion Advice: Advice Provided by Parent
Messages	Social Persuasion Encouragement: Encouragement for College
Messages: Work	Social Persuasion Discouragement: Discouragement for Career
Decision Making Cognitions Personal/Relational	Social Persuasion Discouragement: Discouragement for College
Decision Making Cognitions Personal/Relational: Intuitive	Physical Emotional States Postive
Decision Making Cognitions Personal/Relational: Preference	Physical Emotional States Negative
Decision Making cognitions Educated/Rational	Outcome Expectations About College: Uncertain Outcome Expectations
High Self-Efficacy	Outcome Expectations of Decision Outcome Expectations of Self
	Outcome Expectations of Career Outcome Expectations of Career: Uncertain Outcome Expectations
	Messages: Education
	Messages: Source of Messages-Family Messages: Source of Messages-Cultural Messages
	Decision Making Cognitions Personality

General	Typical
	Decision Making Cognitions Personality: Run Out of Time/Procrastinate Values: Happiness in Career Values: Helping Values: Variant Life Values Low Self-Efficacy

CHAPTER V

DISCUSSION

It's been great. I was reflecting about it, um, these last couple weeks, and I'm, like, I don't know what – where I would be if I didn't go to college this year. Like, I know if this semester would've been the same as last semester, I think I would've dropped out. - *Participant 3912*

Overview of the Chapter

In Chapter IV, the results of this qualitative study of the experiences and expectations of first year, first-generation college students who were undecided about their college major were presented. The researcher studied the experience and expectations of participants around the decision to come to college, career decisions, and the decision to become undecided. In the following chapter, an overview of the study is presented, results of the study are discussed, limitations of the study are presented, and implications for counselors, administrators, and staff in both high school and college are discussed.

Overview of the Study

As discussed in Chapter II, FGCS have been of interest to college retention researchers as these students have been shown to 1.3 times more likely to leave college after their first year compared to their non-FGCS peers (Ishitani 2003; 2006).

Researchers have studied the academic, family, and social backgrounds of these student prior to entering and during college that may influence their college retention and have found that FGCS arrive to college less academically prepared than their peers (Pascarella et al., 2004), score lower on standardized tests (Martinez et al., 2009), have lower academic self-efficacy before entering college (Gibbons & Borders, 2010), perceive a lack of family support for their educational goals while in college (Wang & Castaneda-Sound, 2008), and show lower academic and social integration in college (Prospero & Vohra-Gupta, 2007). During college, researchers have found that FGCS have trouble balancing multiple identities (Brost & Payne, 2011; Coffman, 2011; Olenchak & Hébert, 2002; Owens, 2010; Stieha, 2010), and report they lack knowledge of the structure and function of colleges and the college curriculum (Brost & Payne, 2011; Byrd & MacDonald, 2005). Other researchers have reported that FGCS attend college for increased career opportunities that would not be available to them without a degree (Byrd & MacDonald, 2005; Coffman, 2011; Martinez et al., 2007). Career motives (goals) for college have been found to increase GPA and adjustment to college, and they show a tendency to increase college commitment for FGCS (Dennis et al., 2005). These career motives may hold the key to the retention puzzle for FGCS researchers and college counseling personnel, yet little research has been done on the career development needs of FGCS before and during college.

In their efforts to investigate ways to retain FGCS, researchers have given little attention to FGCS reported career intentions for college attendance (Bradbury & Mather,

2009; Byrd & MacDonald, 2005; Coffman, 2011; Martinez et al., 2009), even though a link has been established between career motives for college and increased GPA, adjustment to college, and increased college commitment for FGCS (Dennis et al., 2005). Social Cognitive Career Theory (Lent et al., 1994) may offer a plausible explanation for one reason why FGCS are not continuing their enrollment in college. SCCT suggests that, for goals to be achieved, a combination of self-efficacy, outcome expectations, and interests are needed for goal formation and goal directed action. By definition, FGCS students lack mastery and have fewer opportunities for vicarious experiences when choosing college majors and completing their degree since their parents did not attend college and often cannot provide guidance. Parents may be unable to provide advice and support about navigating the college experience (Bryan & Simmons, 2009; Byrd et al., 2005; Longwell-Grice & Longwell-Grice, 2008). This lack of vicarious and mastery experiences could lead to lower self-efficacy and outcome expectations surrounding making major choices and career decisions. According to SCCT (Lent et al., 1994), the experiences and expectations of these students prior to college attendance and during college attendance could have an impact on their self-efficacy, outcome expectations, and the formation goals for college and for potentially choosing a career or major. In theory, these elements could ultimately have an effect on a student's performance in college and actions towards the goals of college graduation and career attainment. For undecided FGCS or FGCS rethinking their major, this issue could be accentuated due to the potential lack of specific direction concerning their continued motives for college

attendance and the ultimate goal of college graduation. To date, researchers have not focused on the experiences and expectations of FGCS who are undecided or re-thinking their major.

This study was designed to explore the experiences and expectations of FGCS who were undecided or rethinking their college major through the lens of SCCT. The purpose of this study was to understand the experiences and expectations of these students while choosing to come to college, choosing a career, and the decision to become undecided or to re-think their college major.

Participants in this study included eight female FGCS from a university in the southeastern region of the United States. Participants were interviewed in a semi-structured format by the student researcher; interview times ranged from 36 minutes to 71 minutes in length. Prior to the interviews, participants were asked to complete a demographic questionnaire to gather information concerning gender, age, year in college, family income, highest education completed by mother, highest education completed by father, number of majors considering, length of being undecided about their college major, and other relevant information. During the interviews, participants were asked to complete the Commitment to Career Choice Scale. Following interview transcription, participants were asked to check the transcripts for accuracy and additional thoughts/feedback.

After the interviews were conducted, transcribed, and checked by participants, the author analyzed the transcript data using guidelines set forth in Consensual Qualitative Research (CQR). Using this methodology, a team of three researchers coded the transcripts using predetermined domains that mirror tenets from SCCT in an effort to understand the experiences and expectations of FGCS related to their goals. Coded transcripts were audited by two experienced auditors. The research team proceeded to organize the data into core ideas, categories, and subcategories before beginning the cross analysis. During cross analysis, the researchers assigned labels to categories and subcategories based on the frequency in which they occurred in the transcripts across different cases. Researchers assigned the labels *general*, *typical*, and *variant* to the categories and subcategories. Results from this study will be discussed below according to research question and domains will be analyzed in light of literature on FGCS and SCCT.

Discussion of Research Questions

The author created two research questions to explore the experiences and expectations of FGCS who were undecided or rethinking their college major. The researcher attempted to explore these students' college decision processes, career decision processes, and the decision to become undecided or to rethink their college major. The research questions were:

1. What are the experiences and expectations of first-year, first-generation college students who are undecided about their college major around choosing to come to college and choosing a career?
- 2: What are the experiences and expectations of first-year, first-generation college students around becoming undecided about their major in college?

Research Question 1

During the research interview, participants were asked about their experiences and expectations around choosing to come to college and choosing a career. Specifically, participants were asked to discuss how they chose to come to college, how they chose what to major in, who influenced these decisions and how, as well as whether or not anyone did not show confidence in them during these times. Participants' answers reflected a wide variety of experiences, expectations, decision-making processes, physical/emotional states, forms of social persuasion, values, and messages.

Personal experience. All eight participants discussed high school personal experiences while in high school that influenced their decision to come to college or their choice of a career. Typically, participants mentioned taking active measures such as seeking social support for career/college or active steps toward career or college. Participants discussed seeking help from others for their college applications, looking for support from others during the application process, and talking with others about career options. For instance, Participant 8711 stated:

Google told me all this very interesting stuff. All these forms about college admissions, this website called College Confidential. And this whole thing about like...the numbers game and how like the formula colleges pick the applicants and all this stuff. And then, I was like that...like...it's crazy. So, basically I looked up stuff and realized I had to do all this extra curriculars and I had to build up my resume and that's what I did my Junior year.

Participant 9578 discussed finding support for her application from a high school teacher when she did not understand questions on the application.

But it was only two questions that I had because the application was pretty straightforward – your name, what high school, and the essay part. The essay, I took AP English in high school, so I had my teacher, she had experience with all those things, so I showed her my essay and I was like, "Well, how does this look?" She just got a quick look at it and she was like, "Oh, it looks good."

Most participants in this study also discussed happenstance opportunities and experiences in high school that led to their decision to go to college or to their career decisions. All eight participants discussed happenstance social support for college attendance/career choices from supportive friends, teachers, and environments.

Participant 8711 reflected that the college going culture of her high school led her to feel supported: "Everyone [in high school] has been supportive cause I went to like a school where everyone wanted to go to college. Like I don't think...so many people wanted to go to college so everyone was supportive of each other." Many participants also mentioned happenstance opportunities for career/college attendance such as high school

classes in careers of interest or college field trips. Participant 4998 reflected on the career course she took in high school that gave her experience in the career she originally chose:

In high school, I got to do the CNA [Certified Nursing Assistant] program so that was my first time. We got to go to nursing homes, the hospital in Chapel Hill. We had to gain skills with feeding and all that. Then, I had patients who like come up to me and thank me. They thank me and say they are grateful I made this decision and you know it's support because they need someone to take care of them since their families aren't there. So, I think about that and it makes me want to [pursue a career in Nursing].

These supportive environments also extended to childhood when participants discussed both happenstance and sought experiences for college attendance and career choice. All five participants who mentioned childhood experiences stated that these experiences came from family.

Although most participants mentioned active and happenstance support and opportunities, six students also mentioned experiencing or perceiving a lack of support for career or college in high school. This lack of perceived support manifested in experiences regarding perceived lack of support from parents, lack of information available, or perceived lack of support from others. Participant 4998 commented about parental support and the choice whether or not to attend college, saying, "If I was to get out of high school and get a job, that was okay with my parents. So, it was pretty much me."

The sources of these high school experiences, whether happenstance or not, varied. All but one participant mentioned family as the source of their high school experiences toward college or career. Typically, participants referred to peers, teachers, or high school counselors while relating their experiences. It is also important to note that these sources were mentioned when discussing supportive and non-supportive experiences. The wide range of varying sources indicates that the FGCS were gaining experiences from many sources, although family seem to be the most active source of experiences in high school.

Vicarious experiences. The stories related by first-generation college students in this study indicated they are considering the experiences of others when making the decision to attend college or what career to pursue. All eight participants discussed reflecting on the career, education, decision, and life experiences of others during the college attendance and career choice process. Seven participants mentioned reflecting on the career experiences of others. Five students mentioned reflecting on the education of others. Statements like that of Participant 3912 summarize the type of reflections on the education and careers made by participants and what it meant to them:

Or seeing all my family also. No one has, like, a well-paying job. And, like, seeing ways everyone's alike, just, like, always being short on money or not being able to buy things that they wanna buy. That also just, like – I think, “What’s the key, you know, to live a better life, or at least a little better?” And education, I think, is the answer.

Participants reported reflecting on the experiences of family, parents, peers, teachers, significant others, and pastors. Of these sources of vicarious experiences, family was mentioned by five participants, six participants mentioned parents, peers were mentioned by five participants, and teachers were mentioned by three participants.

Participants also discussed actively comparing actions of others against what they were doing. Half of the participants discussed actively comparing the college decision processes of their peers and how this made them think about what they wanted to do or should be doing.

Social persuasion. During the career and college choice process, participants discussed persuasive conversations with others in their lives that were meant to lead them in one direction or another. Seven participants mentioned receiving advice in one form or another. Six of these students mentioned receiving advice for careers while only a few mentioned receiving advice for college. Participant 5423 discussed career advice she received from others: “Everyone has always told me – ‘you are good with kids and they like you, you know how to handle them and you know how to get a connection with them. So you should look into something with kids.’” This type of advice led her to consider an initial career as a pediatric nurse. Five participants received advice from their parents and other participants mentioned peers, high school counselors, or “people” inferring general talk from people surrounding the participant.

All eight participants discussed persuasion in the form of verbal encouragement from others. Six participants discussed encouragement they received for college and seven participants discussed encouragement for a chosen major or career. Sources of encouragement mentioned by participants included family, teachers, high school counselors, and pastors, but seven participants discussed parents while four discussed peers. Statements like that from Participant 3622 illustrate encouragement from parents to pursue a chosen major: “She was just like, ‘I think, you know, if that’s what you wanna do then you should go for it.’”

Four participants discussed encouragement they received to stay close to home when they went to college. Participant 6829 discussed a conversation her mom had with her: “I think it’s just the fact that when I applied to UNCG and I got in, my mom was just overly excited because she told me, ‘I wanted you to stay near the house, of course.’”

Not all types of social persuasion received by the participants in this study were positive. Six participants discussed some type of discouragement received during the decision to attend college or what career to pursue. Five participants mentioned receiving discouragement for college either in the form of discouragement for their choice college by others or expressions of doubt in the participant’s ability to succeed in college. Participant 9578 discussed doubt expressed by her family members that illustrated the beliefs and experiences of participants and their extended families:

I think my family probably, my aunts and uncles and cousins maybe, they definitely doubted me. They thought, because I've never been the kind I'll

go out to trouble or anything like that because my parents have been strict with me, so they've done well with me. But my family thought that as soon as I got to college, I was just gonna be a mess, that I was gonna go party every day, that I was just gonna, I don't know, pick up bad habits, because their children, they never went to college. They're stuck with fighting for a job every day, so they don't like to see other people [be successful].

Half of the participants in this study discussed discouragement regarding their chosen career. This discouragement was expressed by participants as verbal discouragement for certain career paths, discouragement in their choices, and doubt. Occasionally, discouragement for career choices was disguised as encouragement, like the experience of Participant 9119 whose parents told her she could do something more than the career she originally choose. When asked about anyone who didn't show confidence in her and her choices, she responded,

Well, just my mom. Just like, every time I said I wanted to be a teacher, she said like "That's not good enough, you know, you could do so much more." And just like all the time, even my dad and my sisters are just like, even, my sister [name] is just like "You could do more, you could be more than a teacher."

Several sources of discouragement were mentioned by participants. Parents and family were mentioned as well as peers and teachers as the providers of negative or discouraging social persuasion. Interestingly, there was no consistent source of discouragement.

Physical/emotional states. Physical and emotional states expressed by students during the process of making the decision to attend college or choosing their first career goal included positive, negative, and ambivalent emotions. Five participants' responses about this experience reflected ambivalent emotions like that of Participant 3912 when discussing her ability to go to college: "It just made me feel uncertain." Statements from six participants in this study reflected negative physical/emotional states during this time. Participant 9578 discussed feelings during the college application process: "I'd feel like you could say I felt dumb sometimes because I didn't know how any of that worked, so sometimes I didn't ask." Six participant responses also reflected positive emotions. Participant 3622 reflected on the college and career choices experience: "I walked into the art building and smelled the oil paint and was sold."

Outcome expectations. Outcome expectations during the college/career choice process included expectations of college, career, and major. These outcome expectations included positive, negative, and uncertain expectations. Six participants discussed uncertain outcome expectations regarding college similar to the statement made by Participant 4998: "I didn't know what to expect, just seeing things from movies, and what people say."

Positive, negative, and ambiguous outcome expectations concerning college were also mentioned by participants in this study. Four participants discussed positive outcome expectations for college, including thinking college would "open them up"

(Participant 9119). Four participants discussed negative outcome expectations for college, including thoughts including being scared about college attendance.

Expectations of their chosen career were discussed by six students when recounting their experience choosing a career. Participant responses reflected positive, negative, ambiguous, and uncertain expectations of careers but no one clear type of expectation of career arose. For instance, four participants discussed positive expectations of careers they were interested in. Three participants discussed negative expectations of their chosen career, like Participant 9119 who expected to struggle financially given her chosen fields of interest (education, psychology, or nursing), while also indicating a level of specific career knowledge that still did not deter her from her choice: “It’s like at the same time I know I’m going to need [financially], like my family, we were never like, we never had any money, so, I just want to make sure my family has security.” Ambiguous outcome expectations reflecting neither positive, negative, or uncertain connotations were mentioned by three participants. For example, Participant 6829 stated: “I’m not gonna stay with this four-year degree. I’m gonna keep studying, but I was like I just wanted to come out of college with some type of job.” Finally, uncertainty was a career expectation mentioned by three participants like Participant 9578 who stated,

Well, my one goal had always been being a doctor, but it's a lot of years, so I always had in mind, “What if something happened along the way, like I got married, or I just all of a sudden had a kid, and then I just can't continue studying, or I don't have enough money?” I don't just want to get

right there in the middle and then have no career, have nothing I could work with.

Five participants mentioned ambiguous or uncertain expectations of their careers. Of the six students who endorsed career expectations, only one participant endorsed *only* ambiguous or uncertain expectations of their career. It is important to note that, at the time of this interview, this student reported she was undecided but only considering one career, nursing, the career originally chose in high school.

Six participants mentioned expectations of their college majors when choosing to come to college or choosing a career. Participants expressed positive, negative, and ambiguous expectations of college majors, but the most consistently expressed expectation of major reflected uncertainty. Five participants discussed uncertain outcome expectations concerning their college major when it came to the college attendance or career decision. Participant 8711 discussed being uncertain about the time and commitment needed for the first major she wanted to pursue: “I wasn’t sure of it too because it was a big commitment. Studio arts is a big commitment and I don’t know if I can put in [the work/the time].” Participant 4998 echoed the same sentiment after she chose her first major: “So, since nursing is what I wanted to do, it’s like see how far I can go.”

Messages. Eight participants mentioned statements of commonly held beliefs of their family or culture during the decision to attend college or choosing their

career/major. These beliefs were messages either implicitly or explicitly communicated to the participants on topics such as work, education, collectivism, or gendered messages about work. Seven participants received messages about work, the nature of work for their culture, the importance of work, or what type of work to pursue, while making the decision to attend college or their career decision. Some participants received messages that work took precedent, like Participant 4998: “So we have to push ourselves; our parents like didn’t, school wasn’t a big thing. For them it’s a now kind of thing where you have to work to get stuff now so to further your education [you had to do it yourself].” Others received messages of the kind of work they should pursue, like Participant 9578 whose parents pushed her to pursue a certain career and to make a better life for herself: “I’ve always wanted to be a doctor. My parents sort of pushed me for that. They were like, ‘We want you to be the best you can be. We want you to not suffer like we did and we want you to have a nice, stable job.’” Based on the preceding quotes, messages about work influenced the type of work participants decided to pursue, their decisions to attend college, and their perceived level of support for college attendance.

Five participants discussed how messages about education influenced their decisions to attend college. The importance of continuing one’s education past high school seemed to be the focus of these messages as well as the expectation that attending college after high school is just what people do - almost like subliminal peer pressure. Participant 6829 summarized it this way:

So I wanted to go to college, of course, but my mom also – actually, both my parents – instilled in me that, you know, if you want to do something with your life you just can't have a high school degree. You have to have a secondary education, whatever you want to do. It doesn't really matter. Nowadays you have to have like a secondary degree but, of course, back then also you needed a secondary degree.

Other messages that influenced a few participants related to college attendance and career choice included messages of collectivism or that everyone helps everyone else, messages about drive and the importance of working for what you want, and gendered messages about what type of work men and women can do. All messages were received from family or the individual's surrounding culture.

Decision-making cognitions/styles. Another interesting finding from this study were the thoughts during the decision process and the decision making styles of participants labeled decision making cognitions in this study. Participants gave us a glimpse into the processes that went into *how* they ultimately made decisions, which often involved more than one decision making process or style. Decision making cognitions discussed by participants included more personal/relational decision making cognitions like intuitive and preference based decision, educated/rational cognitions that involved researching decisions and weighing the pros/cons of options, and more personality based decision making that reflected the personality traits of the participant (e.g., procrastination, achievement oriented, driven).

Concerning the decision to attend college and the career decision experience, all eight participants discussed personal/relational decision making styles and cognitions. Personal/relational cognitions reflected styles that were more personal to the participant; either their instincts told them it was the choice they should make, they spoke with others to get their opinions, participants used personal values in their process, or they simply preferred one choice over the other for unspecified reasons. All eight participants discussed intuitive cognitions and decision making styles when choosing to attend college or choosing a career. Responses like those of Participant 3622 illustrate how intuition and personal feelings helped FGCS in this study decide what college to attend:

Yeah, I – I didn't really go visit any other places because this was kinda one that I was like, "I think I wanna go here more than anything." Um, I did look at some of their stuff on-line because I had thought about going to a college in New York and everything, and then I was like that's – I think that's too far, not really what I wanna do. I walked into the art building and smelled the oil paint and was sold.

Six students discussed preference-based decision making styles and cognitions. This was best illustrated when participants discussed their career choices and what tasks they preferred to do. Participant 4998 stated, "I like to do hands-on things. It's like getting work done, helping, making the bed, seeing progress." This statement reflects a knowledge of self that paired well with career knowledge she had already gathered. Four participants mentioned making decisions based on values, like Participant 9578 discussed when making the decision to pursue being a physician's assistant ("So, I like to help people and I like to travel"), and four mentioned dependent decision making

styles/cognitions reflecting taking the thoughts and opinions of others into account while making decisions. Participant 8711 stated, “And the thing is, my best friend is there and like all my friends from high school go there and my best friend is there and I am like why don’t I want to go to this school?”

Participants indicated an educated/rational decision making style. Six participants discussed weighing the pros and cons of their choices or doing research on their choices before making decisions. These educated/rational decision making styles and cognitions are best reflected in the statements of Participant 5423 who stated, “I’m really organized. I’m really, om, I am really, I have to see stuff written down. I have to see it in front of me to work through it. I have to see the pros and cons of everything to see how that will work out later in the future.”

Finally, four participants’ decision making styles and cognitions reflected parts of their personality. Participant 3622 discussed this as follows:

Um, and so I’m the first child in my family actually to go to college. Um, so I think in a way like that was more motivation for me because I was like – like I’m an achiever, like I like making people happy and like doing things and like being able to say, like, “I’ve done this,” and everything. So I guess in a way that was part of the reason too because I was like, “Now I’m gonna be the first person in my family to go to college and get a degree,” and like all this stuff which I’d always wanted to go to college anyway.

Values. During the research interview, participants mentioned important beliefs or things they considered important during their experiences and decision processes.

These specific values give us a glimpse of what was important for FGCS in this study. Happiness in career was discussed by five participants when choosing a career. Five participants also mentioned wanting a career in which they would help others.

Self-efficacy. Finally, participant responses reflected that high self-efficacy was present for participants when discussing the tasks associated with making the decision to attend college or career decisions. The tasks mentioned varied widely, indicating that FGCS gain self-efficacy in different tasks. Participants mentioned high self-efficacy related to tasks such as self-awareness, ability to make career decisions, maturity, ability, college attendance, information gathering, and overcoming barriers. Participant 6829 made the following statement about her choice to attend a four-year college: “But I felt like if I can handle GTCC then maybe I can handle UNCG and I have, you know, taken like five or six classes there. I’m pretty sure that I could handle UNCG, so that’s why.”

Research Question 2

Participants were asked about their experiences and expectations around becoming undecided about their major in college. During the interview, participants were asked to describe how they came to be undecided about their college major, what is difficult about being an undecided student, and what kinds of things they thought about when considering a major. Participants were also asked to take the Commitment to Career Choices Scale and asked follow up questions concerning the thoughts that came up for them while taking the scale and if there was anything in the scale that they expect

from a major. Participant responses reflected a variety of sought and happenstance personal experiences in college, social persuasion, outcome expectations, negative and ambivalent physical/emotional states, messages, and decision making styles/cognitions.

Personal experiences. All eight participants discussed college personal experiences during the experience of becoming undecided about their college major. Most participants in this study discussed taking action to gain career opportunities or information by researching majors or careers of interest or attending information sessions about their current major or major of interest. Seven participants discussed making the decisions that led to becoming undecided about their major, some proactively because they knew they wanted to be undecided or gathered information that led them to the decision to be undecided. Six participants also discussed seeking support for career/college when they were making the decision to become undecided or to change their major, such as asking peers, teachers, and parents for their thoughts about this decision. Half of participants discussed actively seeking college adjustment during the experience of becoming undecided. These students related stories of seeking professors who were supportive of them or becoming more involved on campus, and/or meeting peers.

While in college, participants also discussed happenstance or not sought after personal experiences during the experience of becoming undecided. Five participants mentioned happenstance or even being forced to make the decision to become undecided.

Participant 5423 discussed feeling she had to change her major due to finding the coursework for her chosen career was not what she liked: “I want to help people, but then when I got into the actual classes I was like, I don’t like science, it’s not for me. I can’t do that.” Six participants discussed receiving unsolicited support for college or career during the decision to become undecided. Five mentioned college adjustment or independence that was a result of the experience of becoming undecided about their college major.

Four participants discussed lack of social support/ role models during the experience of becoming undecided about their major and how this affected their ability to make these decisions. Participant 9119 summed up this experience well:

Like I said, just not having a, like a really stable and like, uh, like a really like, I just wish I had a perfect role model, just someone who is, like, been where I’ve been and then made it through and is just successful, just like I want to like sit and talk to them (laughs) you know? Just not having anyone to make, I’ve never been around anyone who has to make educational or career decisions so I don’t even know what kind of thought processes to go through or anything.

The sources of participants’ personal experiences in college during the experience of becoming undecided varied for each type of experience and each participant. Four participants discussed peers as sources of college personal experiences and four mentioned family as sources. Three participants discussed professors who provided personal experiences in college and three participants mentioned counselors in college.

Vicarious experiences. Participants seemed to lack vicarious experiences during the decision to become undecided. In fact, only three participants mentioned vicarious experiences during the decision to become undecided. All three discussed actively comparing the career decisions of their peers to their decision making processes.

Social persuasion. Social persuasion was discussed by participants during the experience of becoming undecided. Typically, participants mentioned receiving advice for career during the experience of becoming undecided. Parents were the most mentioned sources of this advice. Peers and non-specific “people” were also mentioned as sources of this advice. Seven participants discussed receiving encouragement for their major/career during this experience, but the sources of these experiences varied widely. Five participants discussed receiving discouragement for career during the experience of becoming undecided about their college major. Sources of discouragement varied from peers to un-specified “people,” with one participant mentioning parents as a source.

Physical/emotional states. Also, during the experience of becoming undecided, physical/emotional states emerged from participant responses. No positive physical/emotional states were reported by participants. Six participants reported more ambivalent physical/emotional states. Participant 4998 stated, “It’s like, if I don’t do that, I don’t have...the other majors I want to do, I am not sure.” Six participants reported negative physical/emotional states similar to the reflection by Participant 9119: “Being undecided is very difficult sometimes...Cause I really do feel useless.”

Outcome expectations. Outcome expectations were part of the experience of becoming undecided for many participants. Six participants discussed expectations they held of themselves during this experience including the expectation that they *should* know what they want to do, that they will be good at what they do (for a career), and that they will set a good example. Six participants discussed expectations of their decisions, with four endorsing positive expectations of their decisions. Expectations of others were mentioned by half of participants as well.

Seven of the eight participants discussed uncertain outcome expectations of their major during the experience of becoming undecided. These responses reflected that participants did not know what to do once they rethought their major or were uncertain of who they may be in the future. Participant 5423 commented, “Well like I said after nursing, I was like, what are you going to do? I came in here so positive, that I was like, nursing, yeah, I’m going to finish out nursing. But then, it was like what am I going to do now? Where do I go?” Similarly, half of participants reported uncertain career outcome expectations that came up during the process of becoming undecided. Participant 6829 stated, “I just said, Undecided, because I know there’s like many, many degrees out there like Public Health just that I can go into Nursing with and stuff like that. I just didn’t want to declare myself because I didn’t know if I was fully committed to nursing at that time.”

Messages. Similar to the messages received by students when they chose to attend college, two participants also reported receiving messages during the experience of becoming undecided about their college major. In fact, both participants reported receiving the message that a stigma existed about being undecided about their major in college. Both reported this message was a cultural message they felt while in college. Participant 9119 stated, “It seems like everyone’s disappointed almost or something. It seems like a negative thing honestly when I say it and then people their reaction is usually negative.”

Decision-making cognitions/styles. While discussing the experience of becoming undecided, participants discussed their decision-making styles and cognitions. Seven of the eight participants mentioned educated/rational decision making styles during this process. Participants specifically mentioned weighing pros and cons or using the process of elimination to choose a new major. Participant 8711 stated, “Yeah, I definitely know what I don’t want to do, but I don’t know what I want to do so, it’s like I have to...process of elimination. I have to try everything and just cancel them out.”

Six participants related personal/relational decision making styles and cognitions during the process of becoming undecided. The type of personal/relational decision making styles and cognitions varied for participants but included intuitive, preference, and values-based as reflected in the thoughts of Participant 5423:

But I need to see what I’m going to do first. It is hard too. You have so many choices to choose from. It’s like what am I going to do? All the

choices you have to really think about what are you going to do. What you are going to have fun doing throughout your whole life. What you are going to enjoy and not be like oh, I hate this job. Is it something you are going to enjoy? So with all the different options, you have to choose one so it's really hard.

Responses also illustrated how personality based decision making went into the cognitions and styles of participants. Five participants discussed procrastination or feeling like they would run out of time before they made a decision. Three students reflected that they thought their decision was final which affected their decision making.

Values. Unlike the process of choosing to attend college or choosing a major, values were not mentioned frequently during the decision to become undecided. Only two participants discussed values while recounting their experience of becoming undecided. Both participants valued not wasting time or money in college with their choices.

Self-efficacy. Low self-efficacy around the tasks associated with the decision to become undecided were typically reflected by participants in this study. Participants mentioned low self-efficacy concerning their intelligence, their first chosen major, self-awareness, and their ability to make career decisions. When asked what led her to feel undecided, Participant 4998 reflected on questioning her ability by stating, "If I can actually do well...yeah, do well in the classes, that's the reason." High self-efficacy and uncertain self-efficacy were infrequently mentioned by participants.

Discussion of Domains and Categories

The two research questions in this study were designed to explore the experiences and expectations of FGCS who were undecided about their college major. Interview questions were formulated to understand the college and career choice experiences of these students and to understand the experience of becoming undecided about their college major. For the purposes of this study, domains were defined prior to data analysis using the tenets of SCCT to structure the data to better understand the experiences and expectations of undecided FGCS. At the conclusion of cross analysis for this study, nine domains emerged that related to the research questions and one domain emerged that was related to why individuals chose to participate in the study. The nine domains related to the research study included the following: personal experiences, vicarious experiences, social persuasion, physical/emotional states, outcome expectations, messages, decision-making cognitions, values, and self-efficacy. The final domain, reason for participation, helped the researcher understand what motivated this set of FGCS to participate in the study. Once the data for each research question and domain were combined to capture overlapping categories and subcategories, fifteen categories and twelve subcategories were endorsed as *general*. Eleven categories and twenty-seven subcategories were endorsed as *typical*. Categories were labeled *general* if 7-8 participants endorsed them; categories were labeled *typical* if 5-6 participants endorsed them during the interview process. In the sections that follow, the primary researcher will discuss the domains in more detail. The discussion that follows will integrate

findings from both research questions and compare the findings with data from previous, relevant research studies.

Personal Experiences

During the experience of choosing to attend college and choosing a career, FGCS in this study discussed taking active measures to seek social support for the college attendance process or the career choice process while in high school. Participants also discussed actively seeking information during high school regarding college attendance and careers as well as taking active steps toward college attendance or career. This indicates that first-generation college students in this study were resourceful when it came to finding information and used this to assist with their decision making processes. This also indicates that support was available in high school for the first-generation college students in this study. During the college attendance and career choice in high school, participants were learning valuable research skills and garnering support that could help them in college. Participants were also gaining some sense of independence while taking these steps. Given the definition of FGCS, these independent actions make sense as their parents may have lacked the information needed to take the steps to attend college since they may not have had this experience before. These actions shed light on exactly what kind of actions FGCS are taking to attend college or choose a career.

Part of the experiences of college attendance and career choice for FGCS in this study involved happenstance, not sought after, opportunities and social support while in

high school. Sometimes, these opportunities were built into the high school curriculum, like college field trips or career classes. Experiences such as these indicate that high school opportunities and information exist for first-generation college students in this study that may not be sought by the participant but are available for the taking. The high school environments of these students were rich for career exploration opportunities and college admission information. It could be that this environment helped grow the interest of these students and helped build their belief that they could be successful in the college application process or their chosen career, which in turn led to their successful admission and enrollment into college. Students also spoke of happenstance social support in high school from friends, counselors, and others in their lives regarding their career, the college application process, and/or financial aid. This, coupled with actively seeking social support in high school, indicates that through these happenstance opportunities and support, FGCS were learning who to consult regarding their questions and concerns while applying to college and choosing a career.

Happenstance and active (sought) experiences toward college attendance and career choices were also found to be present in the lives of several FGCS during childhood. Families were the primary source of these experiences. This indicates that not only are family influential in the college and career choices of the participants from an early age, but also these experiences were impactful.

Results from this study add to the data previously reported by Wang and Castaneda-Sound (2008) that FGCS perceive a lack of parental support for their educational goals while in college. Participants discussed experiencing a lack of support for career choice and college attendance typically through a lack of informational support, a lack of assistance in the admissions process, or through a lack of individuals to ask questions. Perceived lack of support could be the motivating factor for the resourcefulness of FGCS in finding information about college attendance and their efforts to garner support from other sources.

Overall, sources of personal experiences in high school for college attendance and career choice came from parents, family, peers, teachers, high school counselors, siblings, a pastor, and significant others. Family, peers, teachers and high school counselors were the most mentioned sources of these experiences, but it is important to note that not all of these experiences were positive, with participants reporting perceived lack of support for their goals. During high school years, individuals surrounding a FGCS can have a significant impact on their college attendance and career choices. Considering how close FGCS are to college attendance decisions while in high school, this supports the tenets of SCCT that proximal contextual influences (supports or barriers close to the choice process) can affect the chosen interests and behaviors to change a student's goals, interests, and/or actions (Lent, Brown, & Hackett, 2000).

During the experience of becoming undecided, participants discussed similar active experiences during college. Participants reported seeking career opportunities and information as well as seeking social support while in college. They also reported making active decisions about becoming undecided or re-thinking their college majors, which could compare to the active steps participants took in high school toward college attendance/career. Half of the participants discussed seeking various forms of college adjustment during the experience of becoming undecided. It would seem participants were realizing they were not accomplishing what they wanted and took an active role to find a solution to their situation. It is likely that participants learned this behavior early on during high school while making the decision to attend college or when choosing their career and carried this over to college.

Similar to the results regarding happenstance experiences in high school for college attendance/career choice, participants reported these experiences in college as well while they were becoming undecided. Participants reported happenstance social support for college and career. Unlike high school experiences during the college attendance/career choice process, participants did not report happenstance opportunities for career. It could be that the college environment is not saturated with these opportunities like high school was for these students.

Typically, students did mention happenstance adjustment and independence in college while becoming or as a result of becoming undecided. Regardless of whether

they actively sought or it just happened to them, six total students discussed college adjustment and independence during the experience of becoming undecided. It would appear the experience of becoming undecided has lead students to become more independent and to adjust to the college experience more. During the process of actively searching for the information and opportunities they need to make decisions versus having these be provided to them, FGCS gained a sense of independence and became more involved in college as a way to find the information they needed.

Five participants in this study did report happenstance or forced decision making while becoming undecided. Interestingly enough, all five participants also reported active decision making as part of this process. It could be that these students would have been happy continuing the career path they were on, yet felt compelled, for various reasons, including course difficulties, to become undecided or rethink their major choice. Once that decision was made, they began to exert more independence and take an active role in their decision making processes.

Similar to their high school experiences, four participants reported a perceived lack of social support in college for the experience of becoming undecided. This would seem to support the findings from Wang and Castaneda-Sound (2008) that FGCS perceive a lack of support while in college from family and friends for their educational goals; however, with only four participants endorsing perceived lack of support in this study, the findings from this study are inconclusive.

Finally, unlike the results for research question 1, participants reported varied sources of personal experiences during college for becoming undecided. Family, professors, and peers were mentioned as providing personal experiences while in college. Only three participants mentioned counselors and curiously the two participants who had taken CED 210 (Career and Life Planning taught by doctoral counseling students) did not mention professors or counselors as sources of personal experiences. Also, in the demographic questionnaire, no students mentioned participating in career counseling. Both of these services were offered by the university to help students who are struggling with exactly what the participants in this study were struggling with, so why did these students not utilize these resources?

Vicarious Experiences

Vicarious experiences are a type of learning experience defined by Bandura as watching an individual deemed similar in ability perform a given task (1986). In this study, participants reported two types of vicarious experiences: reflection and active comparison. Reflection referred to the general observations of the experiences and actions of others. Active comparisons referred to not only observing the actions of others, but additionally to the changing of behavior or taking action based on the observations of others.

Concerning the experience of deciding to attend college and choosing a career, all participants mentioned reflections as part of their experiences. Generally, participants

discussed reflections on career including the career choices of others or what others had told them about careers. Five students referred to reflecting on the education of others. Decisions, life, and struggle were also reflections that appeared but were found to be *variant*. Family, parents, and peers were typically listed as the source of these experiences. Teachers, significant other, pastor, and non-specific “people” were mentioned as sources but not found to be typical.

Active comparisons were mentioned by four of the participants during the college attendance/career choice process. All four mentioned actively comparing the college decision processes of their peers to their process. Given the definition of FGCS, participants might not have a parent who had decided to attend college; therefore, they looked to others for vicarious experiences concerning college decisions.

During the experience of becoming undecided, there was a significant lack of vicarious experiences. Participants did not report reflections but did report active comparisons about the major choices of their peers. Again, given that FGCS may not have parents who have experience choosing college majors, it seems logical that they would turn to other sources for these experiences.

Both the process of reflecting on and actively comparing the experiences of others around them indicated that FGCS are processing and critically analyzing the observed experiences of those around them to take action in their own lives. In a way, the actions

and experiences of others are serving as role models for FGCS, who are choosing to mirror the actions of their peers or to choose a different path.

Social Persuasion

Participants in this study reported three different types of social persuasion for both the college attendance/career choice process and the decision to become undecided. Social persuasion is verbal persuasion used to convince an individual that he/she is capable of performing a given task and is considered a type of learning experience (Bandura, 1986). The types of social persuasion defined in this study were advice, encouragement, and discouragement.

During the college and career decision process, participants reported receiving all three types of social persuasion. Typically, they reported receiving advice for career but a few reported receiving advice for college. Sources of advice typically included parents with peers, non-specific “people” and counselors also being mentioned but as variant categories. Given the definition of FGCS, this makes sense as their parents would not have attended college, and therefore may not have advice to give about college. Parents did have experience with jobs and careers, so this may be the subject they feel most comfortable giving advice about.

Participants reported receiving encouragement during the college/career choice process. Types of encouragement received by participants included encouragement for their chosen major/career reported by seven participant and encouragement for college

reported by six participants. Parents were the main source of encouragement, but peers, family, teacher, high school counselors, and “people” were also mentioned. These findings, combined with the experience of social support while in high school, illustrate that FGCS are receiving positive support in the form of actions and verbal persuasion for their college and career goals.

Four participants in this study discussed encouragement they received to attend college close to home. This supports findings by Bradbury and Mather (2009) as well as Bryan and Simmons (2009) that FGCS felt pressure to stay close to home or to return home. This could also relate to the difficulty reported in previous studies about FGCS finding the pull to home challenging to negotiate (Olenchak & Hébert, 2002; Stieha, 2010).

During the college attendance and career choice process, participants did report receiving discouragement. Typically, they reported receiving discouragement for college, but half said they received discouragement for career. Interestingly, there was no consistent source of discouragement. Unlike encouragement which seemed to come consistently from parents, but also from a variety of other sources, discouragement sources seemed to be more unpredictable. This makes it hard for researchers, counselors, and school personnel to develop counteractive measures for discouragement, although several students mentioned expressions of doubt by others to be a motivating factor in their drive to succeed.

Similar to the college attendance/career choice experience, students also reported receiving advice for career mostly from parents. Peers and non-specific “people” were mentioned but parents were seen as the main source. By definition, parents of FGCS have not attended institutes of higher education and lack “college knowledge.” Thus, they may be unable to provide advice and support about navigating the college experience (Bryan & Simmons, 2009; Byrd & MacDonald, 2005; Longwell-Grice & Longwell-Grice, 2008), but they have made career choices before. They may feel more comfortable providing this type of advice to their children.

Students in this study also reported receiving encouragement for their major/career during the experience of becoming undecided. Seven students reported receiving encouragement for major/career during the experience of becoming undecided. This seems to contrast with the study by Wang and Castaneda-Sound (2008), who found FGCS perceived a lack of support while in college, and also seems in contrast with the earlier finding that four students perceived a lack of support while becoming undecided. Interestingly, five students did report receiving discouragement for career during the experience of becoming undecided. It could be that participants in this study were receiving encouragement while undecided but were also receiving messages about what the “right” career/major decision was.

Physical/Emotional States

The set of physical/emotional states expressed by FGCS in this study during the college attendance and career choice process included positive, negative, and ambivalent states. Participant responses included emotional states, for the most part, with only a few physical states mentioned. This varied set of emotions indicates that the college attendance decision and the initial career choice process for FGCS is filled with many emotions that could be confusing to students. While analyzing the data, the research team noted that some participants expressed their stories with vivid emotions while others did not use emotion words to convey their stories. The researchers were unable to identify a reason for this difference, but suspect it may be related to communication styles or the level of reflection and processing the participant had done concerning their experiences.

During the experience of becoming undecided, participants discussed both ambivalent and negative physical/emotional states. In fact, both ambivalent and negative states were typically mentioned. No student mentioned positive physical/emotional states during the experience of becoming undecided. Unlike other studies, the negative states did not include guilt as previously reported (e.g., Bradbury & Mather, 2009; Hartig & Steigerwald, 2007; Olenchak & Hébert, 2002).

Outcome Expectations

During the study interviews, participants reported three categories of outcome expectations that included college, career, and expectations of major. Typically, participants mentioned uncertain outcome expectations for college. This makes sense given that SCCT theorizes that personal experiences (mastery, vicarious, social persuasion, and physical emotional states) influence outcome expectations. FGCS in this study did not express vicarious experiences and lacked social persuasion in the form of advice for college. It would seem that this led to the development of uncertain outcome expectations for college attendance.

Participants also discussed positive, negative, and ambivalent outcome expectations for college. Four participants discussed positive outcome expectations for college and four participants discussed negative outcome expectations for college. Three of the participants who discussed negative outcome expectations also discussed positive outcome expectations about college. The statements of both positive and negative outcome expectations for college expressed by the same participants also indicates that some participants are able to see the benefits of college and were not detoured by negative outcome expectations. Four participants discussed more neutral/ambiguous outcome expectations of college, like Participant 4998 who stated she expected it would be “challenging.” These findings are interesting as the only commonly shared outcome

expectation held by the students in this study was that they did not know what to expect from college attendance.

Participants also typically expressed varied positive, negative, and uncertain outcome expectations about career during the college attendance/career choice decision. The variety of expressed career expectations indicates that most students have some level of career knowledge leading into the choice process, but the expression of positive and negative expectations of chosen careers were only expressed by five individuals. Uncertain or ambiguous outcome expectations indicate that individuals in this study may have limited knowledge about how to convert their career knowledge into action or a lack of knowledge about how this career information influences their college career. This also relates to the uncertain outcome expectations of major that were expressed by five participants. Considering FGCS are the first in their families to attend college, one would expect participants would not know what to expect when it came to college majors. The uncertain outcome expectations of majors typically expressed by participants indicates a lack of knowledge surrounding college majors, but also a sense of resiliency and commitment that students would still attend college and pursue their initial chosen major, even though they do not know what to expect.

During the experience of becoming undecided, seven participants mentioned uncertain outcome expectations of major. Relatedly, half of participants endorsed uncertain career outcome expectations during this time. It would seem that the uncertain

expectations that existed during the college attendance/career choice process extend into college. Participants are not sure what to expect from their major, which shows a need for more major and career information, career counseling, and contact with advisors. Given the previously reported lack of vicarious experiences for choosing a college major, SCCT would predict the formation of outcome expectations would be affected, leading to uncertain outcome expectations (Lent et.al, 1994).

Messages

Participant experiences often related messages participants received during their experiences. These messages were stated as if they were absolute truths and commonly held beliefs. All messages were reported to be received from family or the participant's surrounding culture.

Concerning the decision to attend college or choose a career, participants reported receiving messages about work and education from family and culture, with work messages mentioned generally by participants. This is an interesting finding as messages influenced participants' decisions to attend college or career decision and were stated as beliefs not questioned by participants, like the belief that Participant 3622 held that everyone goes to college after high school now: "I mean it's just like – it's something people do, you know, just like, 'Oh I graduate high school and I go to college.'" They differed from social persuasion in that messages were not meant to point a participant in a direction but were to be considered absolute truths and therefore seemed stronger than

social persuasion and influenced decisions, interests, self-efficacy, outcome expectations, and goals. Participant 6829 discussed the belief in her family that to be successful you must have a post-secondary education:

Both my parents – instilled in me that, you know, if you want to do something with your life you just can't have a high school degree. You have to have a secondary education, whatever you want to do. It doesn't really matter. Nowadays you have to have like a secondary degree but, of course, back then also you needed a secondary degree.

Where these messages fit into the SCCT puzzle needs to be explored further.

The only message mentioned by participants during the experience of becoming undecided was the cultural message of a stigma around being undecided about their college major. Two participants discussed their perception of a negative stigma existing in their surrounding culture. It is interesting that two participants without probing and in separate interviews mentioned perceiving this stigma.

Decision Making Cognitions/Styles

While discussing their experiences, participants discussed their thought processes and decision making styles. This was not originally a domain to be coded prior to data analysis and it is not a tenet discussed in SCCT. Decision making cognitions fell into three main categories: personal/relational, educated/rational, and personality.

During the college choice and career decision experience, all participants discussed using personal/relational decision making styles. Typically, students referred

to intuitive or preference based decision making cognitions. These personal/relational decision making styles/cognitions indicate that there are other factors that influence the decisions of FGCS. The decision to go to college and the decision about what career to pursue are personal for FGCS and they need to feel comfortable with their choices. Eight FGCS in this study used intuition and six used preference to feel comfortable with their decisions. Half took either the opinion of others or used values as decision making styles in their college and career decision making processes.

Eight participants reported using educated/rational decision making cognitions. Participants discussed researching their choices as well as weighing pros and cons when making decisions. This illustrates planned decision making by FGCS.

Educated/rational decision making cognitions were mentioned by seven of the eight participants when discussing the experience of becoming undecided. Thought process like process of elimination were skills learned during the college/career choice experience and carried into the decision to become undecided. Since this approach lead them to successful enrollment in college, FGCS in this study may have been relying on methods that worked in the past. This could also be true of personality-based decision making cognitions mentioned by five participants. All five mentioned the thoughts of running out of time or procrastinating. Both educated/rational and personality decision making styles and cognitions are intriguing, as both of these styles are easy for

counselors to identify in students. FGCS could utilize these strengths later with future decisions.

Values

Personally held beliefs were discussed by participants during their experiences. These beliefs or values played an important role in the choices participants made. During the career choice process, participants discussed wanting to be happy in the career they choose. Typically, participants also spoke of wanting to help people as part of their careers. Financial/job security and family values were found to be variant in this study, unlike Bui (2002) who found significantly more FGCS attend college to help their families financially.

The only value mentioned by participants during the experience of becoming undecided was the value of not wanting to waste time. This value relates to the personality based decision making cognitions of procrastinating and thinking they were running out of time. FGCS in this study seem to be concerned with running out of time to make decisions due to the fact that many did not want to stay in college more than four years.

Self-Efficacy

Self-efficacy has been defined as an individual's belief in his/her ability to successfully complete a given task. Participant responses reflected high, low, and

uncertain levels of self-efficacy, but the tasks mentioned varied. High self-efficacy was mentioned by six participants regarding the experience of attending college or career choices. It could be that participants expressed high self-efficacy in the tasks associated with college attendance and career choice since students have already performed these tasks previously and know what it takes to do them. They have also successfully enrolled in college. This is reflected also in the number of experiences reported earlier by students, both sought and happenstance, toward college attendance and career choice. As SCCT theorizes, personal experiences with these tasks led to higher self-efficacy. Since the expressed tasks that FGCS expressed high self-efficacy in varied so widely, counselors and other staff members should inquire with FGCS about their perceived abilities in all of the above tasks.

Concerning the experience of becoming undecided, participants' responses reflected low self-efficacy around majors, intelligence, ability to accomplish their goals, their ability to make decisions, and self-awareness. Only two participants discussed high or uncertain self-efficacy. This mirrors Longwell-Grice and Longwell-Grice (2008) who found that FGCS reported low academic self-efficacy while in college. Also, in a previous study, the vocational outcome expectations of FGCS were shown to be predicted by self-efficacy (Ali, McWhirter, & Chronister, 2005); participants in this study discussed uncertain career and major outcome expectations and also exhibited low self-efficacy. Could low self-efficacy in college be a predictor of being undecided in college?

SCCT and FGCS Experience and Expectations

One of the principal tenets of Social Cognitive Career Theory is the idea that personal experiences build self-efficacy for tasks and help mold outcome expectations (Lent et al., 1994). Both self-efficacy and outcome expectations lead to interests and goal formation as well as performance toward goals. We can see this theory in action as we think about the first part of research question one: the experiences and expectations that lead to college enrollment. Participants of this study successfully accomplished this goal since they were enrolled in college during this study. They elaborated on their journey to college by mentioning experiences of support, lack of support, opportunities, social persuasion, decision-making processes, and thoughts of high self-efficacy.

What is interesting to consider is the difference in the elaboration of the experience of becoming undecided. There seems to be considerably less detail and data concerning this experience. It could be that the participants were so close in time to the experience of becoming undecided that detailed reflection had not occurred. Taking the tenets of SCCT into consideration and the fact that seven of the eight participants were still considering more than one major or career, students may be showing low self-efficacy and more uncertain outcome expectations due to the fact that they have not successfully completed the process of being undecided and choosing a major.

When taking into account the process of choosing an initial career of interest and the decision to attend college, researchers, counselors, and college professionals can learn

important facets of how FGCS successfully accomplish goals, what thoughts go into the decision making process, what experiences helped guide them to the completion of their goals, and where they are receiving information and support for their endeavors. This information can then be used to structure the delivery of information regarding major exploration, advising, support systems, and other necessary resources for undecided, first-generation college students.

Commitment to Career Choices Scale

During the interview, participants were asked to take the Commitment to Career Choices Scale (CCCS). Cronbach's alpha coefficient of the Vocational Exploration and Commitment (VEC) scale was observed at .93, indicating high internal consistency, but the alpha observed for the Tendency to Foreclose (TTF) was .81, indicating moderate internal consistency of this scale with the participants in this study although this alpha was consistent with the observed alphas during the validation studies of the CCCS. VEC scores for this sample were moderate compared to other studies of college populations indicating that participants had, on average, considered barriers and options related to career options considered. TTF scores were slightly above average indicating a tendency to foreclose on career options prior to a thorough exploration process. Since all but one participant was considering multiple career and major options, moderate scores on the VEC would be reflective of the undecided state of most participants. The TTF scores of participants may be reflective of the personality based decision making styles/cognitions

discussed by participants during the experience of becoming undecided. Participants typically mentioned feeling they would run out of time to make a decision, a thought that may lead students to foreclose on career options.

Reasons for Participation

During the interview process, participants were asked to give the reasons they participated in this research study. Results were variant, but they do shed some light onto the motivations of the participants. Four participants discussed participating because it would help them understand what was happening and give them a broader perspective. For example, Participant 3912 stated, “I knew it was gonna be good, and, um, just because, because it was something that I was dealing with right now, and I just feel like maybe it would help me out, understand some of my struggles.” Four participants chose to participate because they wanted to help others by sharing their stories, such as Participant 6829:

Because I feel like, you know, someone is going through what I went through – you know, being a freshman, first-time college student and not knowing who to go to in life. So, you know, if they hear this interview or they see it or they read it then hopefully they can have like a peace of mind to it and, like, not over think it, not over-worry and know that, you know, UNCG is a very family-oriented college. You know, you have the support of your advisors and your teachers and colleagues and family to push you to wherever you want to be in life. Yeah.

Four participants discussed wanting to help the researcher as a source of their motivation to participate. Curiously, when looking at the results, all eight participants mentioned

helping in one form or another as their motivation for participating in this study.

Typically, when it came to choosing a career, participants in this study also mentioned helping as a value that was important for them to consider. The results from multiple categories in this study indicate that the desire to help is an important value for participants and it has helped shape their decision making.

Limitations

No research study is without its limitations. The primary researcher reflected on the procedures, research team make up, participants, and other parts of the research process to report any potential limitations to the study.

One limitation of this study concerns the choice of participants in this study. The small number of participants ($n = 8$) is typically seen as a limitation of qualitative studies of this size. Given the large number of *typical* and *general* findings, however, it appears the results of this study would be transferrable to the FGCS population demographics studied. Also, all participants in this study were female, eliminating potential differences that may be experienced by male FGCS. One student in this study was finishing her sophomore year and therefore more removed from the experience of becoming undecided her first year in college. Three participants were not born in the United States and immigrated here prior to college attendance. Three other students reported being the first in their family to be born and raised in the United States. The heterogeneity of the sample could potentially cause some of the results from this study to be related more to

the experience of being an immigrant or navigating the college attendance and experience process without parents who had experience with the United State's educational system.

Another limitation of this study concerned the composition of the research team. The author served not only as primary researcher, but also as a member of the data analysis team and sole interviewer. These multiple positions could potentially influence the data analysis. The research team was composed of all females with limited experience with CQR. The auditors were also both female but held prior experience with CQR.

Finally, the Commitment to Career Choice Scale posed potential limitations as well. During the interview process, several participants found the language used in the scale to be difficult to understand. Also, the coefficient alpha for the Tendency to Foreclose portion of the scale was low, indicating results should be interpreted with caution. One participant's scores varied greatly from the scores of other participants.

Suggestions for Future Research and Implications for Counseling

Results from this study point to several areas for future research and implications for counselors at both the college and high school level. For college counselors, results from this study have provided them with new areas to explore concerning the decision making cognitions of FGCS as well as their levels of self-efficacy. Researchers need to investigate the self-efficacy of FGCS who are undecided about their major and develop interventions to target the development of this self-efficacy.

Prior to attending college, participants in this study reported taking active measures to accomplish their college and career goals, but they also reported being given opportunities and support that they did not seek out. These happenstance opportunities need to be researched more by counselors in higher education so that similar programs and information communication strategies can be employed in college settings. Advisors and career counselors should work to develop ways to communicate major exploration and career opportunities/information in ways that are easily accessible to students who are seeking this information. Also, more research is needed on the sources of vicarious experiences of FGCS during the process of becoming undecided about their major.

In high school, counselors should build on what they are already doing for students regarding college programming and the application process. More research needs to be conducted on the type of career exploration and counseling that is happening in high school for prospective FGCS who would like to attend college. Participants in this study related that high school teachers were making a difference in their college and career choices. More research needs to be conducted on college/high school partnerships that promote career exploration as well as teachers as social supports for FGCS.

Finally, in high school, participants in this study reported learning valuable research and decision making skills, yet they did not always utilize these in college. Research needs to be conducted on why these skills are not translating and being applied into the college setting.

Conclusion

College counselors and college student personnel have been interested in the retention of FGCS. This study helps these individuals understand the experiences of FGCS who are undecided about their major during the experience of becoming undecided and the experience of making the initial college attendance and career choice. By using the lens of SCCT during the analysis, results from this study show that FGCS who are undecided about their college major need additional support, information, and experiences in their journey to graduate from college. The lack of role models and social persuasion while in college led to uncertain outcome expectations that could eventually affect college retention. Programs designed to increase the retention of FGCS in college should examine the experiences these students have prior to college to understand how they successfully navigate new experiences. Finally, this study provides areas for further exploration of the FGCS undecided experience.

REFERENCES

- Ali, S. R., McWhirter, E. H., & Chronister, K. M. (2005). Self-efficacy and vocational outcome expectations for adolescents of lower socioeconomic status: A pilot study. *Journal of Career Assessment, 13*, 40 – 58.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall, Inc,
- Betz, N.E., Hammond, M., & Multon, K . (2005). Reliability and validity of response continua for the Career Decision Self-efficacy Scale. *Journal of Career Assessment, 13*, 131-149.
- Betz, N. E., Klein, K., & Taylor, K. (1996). Evaluation of a short form of the Career Decision Self-Efficacy Scale. *Journal of Career Assessment, 4*, 47-57.
- Betz, N.E., & Voyten, K.K. (1997). Efficacy and outcome expectations influence on career exploration and career decidedness. *The Career Development Quarterly, 46*, 179-189.
- Blustein, D. L., Ellis, M.V ., Devenis, L. E. (1989). The development and validation of a two-dimensional model of the commitment to career choices process. *Journal of Vocational Behavior, 35*, 342-378.

- Bradbury, B. L., & Mather, P. C. (2009). The integration of first-year, first-generation college students from Ohio Appalachia. *NASPA Journal, 46*, 258-281.
- Brost, J., & Payne, K. (2011). First-generation issues: Learning outcomes of the dismissal testimonial for academically dismissed students in the arts & sciences. *New Directions for Teaching and Learning, 127*, 69-79.
- Bryan, E., & Simmons, L. A. (2009). Family involvement: Impacts on post-secondary educational success for first-generation Appalachian college students. *Journal of College Student Development, 50*, 391-406.
- Bui, K. T. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal, 36*, 3-11.
- Byrd, K., & MacDonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspectives. *Community College Review, 33*, 22-37.
- Choy, S. (2001). Students whose parents did not go to college: Postsecondary access, persistence, and attainment. Washington, DC: U.S. Department of Education, National Center for Educational Statistics.
- Coffman, S. (2011). A social constructivist view of issues confronting first-generation college students. *New Directions for Teaching and Learning, 127*, 81-90. doi: 10.1002/tl.459

- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46, p. 223-236.
- Diegelman, N. M., & Subich, L. M. (2001). Academic and vocational interests as a function of outcome expectations in social cognitive career theory. *Journal of Vocational Behavior*, 59, 394-405.
- Gibbons, M. M., & Borders, L. D. (2010). Prospective first-generation college students: A social-cognitive perspective. *The Career Development Quarterly*, 58, 194-208.
- Higher Education Act of 1964. Pub. L. No. 110-315, § 402A, 20 Stat. 1070a-11 (1965).
- Hollenbeck, J. R., Williams, C. R., & Klein, H. J. (1989). An empirical examination of the antecedents of commitment to difficult goals. *Journal of Applied Psychology*, 74, 18-23.
- Ishitani, T. T. (2003). A longitudinal approach to assessing attrition behavior among first-generation students: Time-varying effects of pre-college characteristics. *Research in Higher Education*, 44, 433-449.
- Ishitani, T. T. (2006). Studying attrition and degree completion behavior among first-generation college students in the United States. *The Journal of Higher Education*, 77, 861-885.

- Lent, R. W., Brown, S. D., Brenner, B., Chopra, S. B., Davis, T., Talleyrand, R., & Suthakaran, V. (2001). The role of contextual supports and barriers in the choice of math/science educational options: A test of social cognitive hypotheses. *Journal of Counseling Psychology, 48*, 474-483.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45*, 79-122.
- Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*, 36-49.
- Lent, R. W., Brown, S. D., & Larkin, K. C. (1987). Comparison of three theoretically derived variables in predicting career and academic behavior: Self-efficacy, interest congruence, and consequence thinking. *Journal of Counseling Psychology, 34*, 293-298.
- Lent, R. W., Brown, S. D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003). Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models, *Journal of Counseling Psychology, 50*, 458-465.

Locke, E. A., & Latham, G. P. (1990) *A theory of goal setting and task performance*.

Englewood Cliffs, NJ: Prentice-Hall, Inc.

Longwell-Grice, R., & Longwell-Grice, H. (2008). Testing Tinto: How do retention theories work for first-generation, working-class students. *Journal of College Student Retention, 9*, 407-420.

Martinez, J. A., Sher, K. J., Krull, J. L., & Wood, P. K. (2009) Blue-collar scholars? Mediators and moderators of university attrition in first-generation college students. *Journal of College Student Development, 50*, 87-103.

McWhirter, E. H., & Metheny, J. (2009). *Vocational Outcome Expectations-Revised. A revised measure of expectations associated with high school career planning*. Unpublished measure.

McWhirter, E. H., Rasheed, S., & Crothers, M. (2000). Effects of high school career education on social cognitive variables. *Journal of Counseling Psychology, 47*, 330-341.

Metheny, J., & McWhirter, E. H. (in press). Contributions of social status and family support to college students' career decision-making self-efficacy and outcome expectations. *Journal of Career Assessment*.

- Metheny, J., McWhirter, E. H., & O'Neil, M. (2008). Measuring perceived teacher support and its influence on adolescent career development. *Journal of Career Assessment, 16*, 218-237.
- Olenchak, F. R., & Hébert, T. P. (2002). Endangered academic talent: Lessons learned from gifted first-generation college males. *Journal of College Student Development, 43*, 195-212.
- Owens, D., Lacey, K., Rawls, G., & Holbert-Quince, J. (2010). First-generation African American male college students: Implications for career counselors. *The Career Development Quarterly, 58*, 291-296.
- Pascarella, E. T., Pierson, C.T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experience and outcomes. *The Journal of Higher Education, 75*. 249-284.
- Peterson, S. L. (1993). Career decision-making self-efficacy and institutional integration of underprepared college students. *Research in Higher Education, 34*, 659-685.
- Prospero, M., & Vohra-Gupta, S. (2007). First-generation college students: Motivation, integration, and academic achievement. *Community College Journal of Research and Practice, 31*, 963-975. doi: 10.1080/10668920600902051
- Stieha, V. (2010). Expectations and experiences: the voice of a first-generation first-year college student and the question of student persistence. *International Journal of Qualitative Studies in Education, 23*, 237-249.

- Strieger, K.J., & Kerpelman, J.L. (2010). Career identity development in college students: Decision making, parental support, and work experience. *Identity: An International Journal of Theory and Research, 10*, 181-200.
- Stuber, J. M. (2001). Integrated, marginal, and resilient: Race, class, and the diverse experiences of white first-generation college students. *International Journal of Qualitative Studies in Education, 24*, 117-136.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior, 22*, 63-81.
- Wang, C-C. D. C., & Castaneda-Sound, C. (2008). The role of generational status, self-esteem, academic self-efficacy, and perceived social support in college students' psychological well-being. *Journal of College Counseling, 11*, 101-118.

APPENDIX A
INITIAL STUDENT EMAIL

Dear (Insert Student Name),

Thank you for expressing interest in “The Major Decision”, a group for students who are undecided or re-considering their college major. Before you make a decision regarding whether or not to participate in the group, I wanted to give you a little more information about the group as well as learn a little bit more about you.

This group is part of a larger research study for my dissertation. Information regarding the study is attached in the document labeled “Informed Consent”. If you wish to participate in this study and are chosen for group participation, I will place your name in one of two study groups and provide you with further instructions from there.

Please read through the attached Informed Consent document. If you agree to participate in this study, you will be asked to sign a copy of this form at our first group meeting. Also, please complete and submit the attached “Demographics Questionnaire” so I can learn a little more about you. You can simply reply to this email with your completed questionnaire, but only do so if you still wish to participate in the group.

If you have any questions regarding the group or the forms attached, feel free to email me at mawheele@uncg.edu.

Thank you,

Melissa Wheeler

APPENDIX B

DEMOGRAPHICS QUESTIONNAIRE

Demographics

Directions: Please check or write the answer that applies to you.

1. Gender: Male Female
2. Age: _____
3. Ethnicity:
Caucasian/White: African American/Black Hispanic/Latino
Native American Asian American/Asian Multiracial
Other
4. Class Rank: First-year Second-year Other _____
5. Do you consider yourself a first-generation college student?
Yes No Not sure
6. Highest Education Level Completed by Mother:
Did Not Complete High School High School Some College
Community or Technical College College
Graduate/Professional School
7. Highest Education Level Completed by Father:
Did Not Complete High School High School Some College
Community or Technical College College
Graduate/Professional School
8. Do you live: On-Campus Off-Campus
9. Are you undecided or rethinking your major? Yes No
10. If yes, how many majors are you considering? _____
11. Which careers are you interested in? _____

12. Have you participated in or are you participating in career counseling while in college?
Yes No

If answered Yes, please explain what topics/activities were covered in career counseling?

APPENDIX C

TREATMENT GROUP FINAL QUESTIONNAIRE

The Major Decision: Final Thoughts

Please rate each group treatment activity or intervention on the 5 point scale based on how helpful you felt the intervention was in your major choice process.

	Not Very Helpful			Very Helpful	
	1	2	3	4	5
1. Pair and Share First Jobs	1	2	3	4	5
2. Career Genogram	1	2	3	4	5
3. Picturing Future Career	1	2	3	4	5
4. Career Values Sort	1	2	3	4	5
5. Panel Discussion	1	2	3	4	5
6. High School Interests	1	2	3	4	5
7. Undergraduate Bulletin					
Exploration	1	2	3	4	5
8. Decisional Timeline	1	2	3	4	5
9. Goal Setting Race	1	2	3	4	5
10. Communicatin Role-Play	1	2	3	4	5
11. Mindfulness /Breathing	1	2	3	4	5
12. Group Discussions	1	2	3	4	5

APPENDIX D

CONTROL GROUP FINAL QUESTIONNAIRE

Final Group Questionnaire

Please answer the following questions to the best of your ability.

1. Are you undecided or rethinking your major? Yes No

If no, what major have you chosen? _____

2. In the past five weeks, have you spoken to anyone regarding your future career or major?

Yes No

If yes, who did you talk with? _____

What did you talk about?

3. In the past five weeks, have you conducted any research online about future majors or careers? Yes No

If yes, what did you research and what websites did you visit? _____

4. Are you still interested in participating in a career group to help you decide on a major?

Yes No

APPENDIX E
ASSESSMENT PACKET

Vocational Outcome Expectations Scale-Revised

Directions: Please respond to each question by marking your answers along the 4-point scale shown below:

	Strongly disagree 1			Strongly agree 4
My career planning will lead to a satisfying career for me.	1	2	3	4
I will be successful in my chosen career/occupation.	1	2	3	4
The future looks bright for me.	1	2	3	4
My talents and skills will be used in my career/occupation.	1	2	3	4
I have control over my career decisions.	1	2	3	4
I can make my future a happy one.	1	2	3	4
I will get the job I want in my chosen career.	1	2	3	4
My career/occupation choice will provide the income I need.	1	2	3	4
I will have a career/occupation that is respected in our society.	1	2	3	4
I will achieve my career/occupational goals.	1	2	3	4
My family will approve of my career/occupation choice.	1	2	3	4
My career/occupation choice will allow me to have the lifestyle that I want.	1	2	3	4

Career Decision Self-Efficacy

CDSE, Copyright © 2012 by Nancy E. Betz and Karen M. Taylor. All rights reserved in all media.
Published by Mind Garden, Inc., www.mindgarden.com Page

www.mindgarden.com

To whom it may concern,

This letter is to grant permission for the above named person to use the following copyright material for his/her research:

Instrument: ***Career Decision Self-Efficacy Scale***

Authors: ***Nancy E. Betz and Karen M. Taylor***

Copyright: ***2012 Nancy E. Betz and Karen M. Taylor. All rights reserved.***

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

Robert Most

Mind Garden, Inc.

www.mindgarden.com

Commitment to Career Choices Scale

Blustein, D. L., Ellis, M.V ., Devenis, L. E. (1989). The development and validation of a two-dimensional model of the commitment to career choices process. *Journal of Vocational Behavior*, 35, 342-378.

Permission to use the CCCS for research purposes on September 14, 2012 by Dr. Michael Ellis. The primary researcher was granted this permission with the provision that a copy CCCS not appear in the dissertation or other publications. Requests for a copy of the CCCS should be directed to Dr. Ellis at mvellis@albany.edu.

APPENDIX F

“THE MAJOR DECISION” GROUP CURRICULUM

The Major Decision: Career Group Intervention for FGCS

Introduction

First-generation college students (FGCS) have been the focus of recent research in higher education as these students have lower retention rates in college compared to their peers. Researchers have studied the profile, academic background, reasons for attending college, and college experiences of these students in an attempt to understand what may cause these students to leave college before graduation and well before their peers.

Many FGCS mention attending college for improved career opportunities or to help their families out financially. The pressure to attend college for career or to help family can cause students also to feel pressured to choose a college major quickly or to choose a major they think will fulfill their desire to help their family financially, even if this major does not satisfy their interests. This curriculum was designed to assist FGCS in the career development and career exploration process.

The activities contained in this curriculum book are based in Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994). SCCT theorizes that a person's self-efficacy and outcome expectations will translate to career interests and career goals. Self-efficacy can be understood as a person's belief that they can successfully accomplish a given task and outcome expectations are defined as a person's expectations about the

outcomes that will happen once a task is completed. Goals that are clear and ones students are committed to will lead to actions that lead to successful completion of goals. According to Social Cognitive Theory, students gain self-efficacy through learning experiences, including mastery experiences (e.g., successful completion of a task), vicarious experiences (e.g., watching a role model complete a task), social persuasion (e.g., encouragement to engage with a task), and the physical/emotional states while completing tasks (e.g., excitement, anxiety). When it comes to choosing a major in college, FGCS lack mastery experiences and they do not have the vicarious experiences of their parents to help build career or major decision self-efficacy.

The activities and discussions in this curriculum were designed to provide students with the learning experiences they need to build self-efficacy surrounding choosing a major in college. As a facilitator, the most important thing you can do is to provide students with positive feedback and encouragement while completing the curriculum. The discussion topics and activities are designed to allow students to explore their background, values, experiences, and family expectations. You will need to monitor students' emotional states while exploring sensitive topics and thoroughly process negative emotions students may experience. Although every FGCS will have unique experiences, some things they may have in common are lower levels of information about college and career, worries about not fitting in, and financial constraints. In every session, be sure to think about how you might respond if students are having trouble with the assigned activities due to some of these typical FGCS characteristics. By increasing their career exploration

activities, career decision making self-efficacy, knowledge of college majors, and vocational outcome expectancies, FGCS will hopefully increase their chances of graduating from college.

This group intervention can be held in a classroom, group counseling room, or career library with workstations (tables or desks) for all participants and computer/internet access. Preferably, the setting should have one computer for every two participants. Many of the activities have alternate instructions if access to computers and/or the internet is limited. The facilitator will need a computer with internet access and a projector to project the computer screen. The room should be stocked with ample scrap paper and pens for students and a dry erase or chalk board.

Group participants should be first-generation college students in their first year of college who are reconsidering their majors, are undecided about their majors, or are indecisive about their career. Groups can range from 5-10 participants per group. The group has been divided into five mandatory group meetings lasting two hours each. During every group session, participants will be given a 5-10 minute break depending on the activities planned for the group.

Each group meeting will allow students to complete a mastery experience related to the topics covered that day. Students will have a chance to practice the activities together and then complete a similar activity alone or with a partner. All complete activities and accompanying student notes will be kept in a folder that will be provided to each student

at the start of the group. Students will also be given the chance to explore prior experiences and current emotions through process questions to gain insight into their background experiences that may help facilitate future decisions. It is imperative that the facilitator not skip any of these questions and take the time to process each question separately. These questions are labeled “Process Questions” and are meant to be asked one at a time with pause taken to allow students to process and answer each question. The Process Questions will spark discussion, so follow the group’s lead using facilitative listening and reflections to move the group into deeper processing.

Day 1: Introduction to Group

Goal: To introduce participants to the study (applicable to pilot studies of this program), to take initial assessments for study, learn group rules, begin forming group dynamics, and explore students' backgrounds and career influences.

Objectives: By the end of this session, the students will be able to list career influences in their life.

Materials: Study Assessments, Chart paper, Markers, White paper, Folders for each student to keep their group activities and other materials

Procedure/Time Allotment:

Welcome: 5 minutes. Thank you for joining the _____ group aimed at giving you the tools you will need to begin considering or reconsidering your chosen college major and one day, your future career. I am your group leader and career counselor (say name). (Give a brief introduction about who you are, where you are from geographically, and how you ended up with the career you are in. Emphasize that you too struggled with deciding what to do, what to major in, and who to listen to, and where to get help.) Today, we will start by taking a few brief assessments as part of the research study you previously agreed to participate in. We will then take some time to talk about the purpose of this group, to get to know each other, and to set some group ground rules.

Finally, we will take some time to talk about important people and things you want to consider when making decisions about your life. Let's begin by taking the assessments.

Hand out assessment packets and review informed consent

Assessment Administration: 20 minutes (will know more when pilot testing complete)

Group Introduction: 5 minutes. Thank you again for agreeing to participate in this group. It may come as a surprise to you, but my hope for you by the end of this group is not that you will leave here knowing exactly what you want to do for the rest of your life. If that happens- okay! But if it doesn't, my hope for you by the end of this group is that you will have begun understanding yourself, what's important to you, how you make decisions, and how to find information and resources that will help you in any job search or major search.

“Why would you want that?”- you ask. The average person changes careers 5-7 times in their life time. That's not jobs, that's careers. What do you think the difference is?

(Take answers from group. Look for someone whose answer sounds a lot like- jobs are the positions you take that could or could not be part of your career. A career is the area of work you are interested in.) Many jobs can make up a career. For instance, your career could be elementary school teacher, but you have worked several jobs...you could work a job at ABC Elementary, then another at Greensboro Elementary, but you could also have jobs to get through college on your way to this career, like working at Target or on campus. Do you know anyone who has changed careers that much? *(Take stories,*

answers, if you have an example of someone who has done this elaborate. Emphasize that changing careers and jobs throughout your lifetime is normal and can be expected.)

Introductions/Warm-Up activity: 10 minutes . So, as a way to get to know each other, we are going to do a few activities. First, we are going to go around the room and I ask that each of you tell us your name, where you are from, and something about yourself that you are proud of. (Start with yourself and go around the room allowing students to provide answers. Take note of what they are proud of- if family, school, or peer relationships are mentioned write down names of students who mentioned these and what they mentioned. This will be helpful information later.)

Group Rules: 10 minutes. Now that we at least know each other's names, we do need to talk a little bit about how you want this group to run. Some things are pretty set, like the time we will spend in this room, but other things like what we tell other people about this group are not. College campuses are pretty small and we will be sharing a lot about ourselves. Some of it you may be okay with others outside of this group knowing and some things you may not be as comfortable with. We need to establish a few group ground rules about how we will act inside and outside of group so we all know what to expect. I want us to come up with these rules together as every group is different. I would actually like to start with a rule I know is super important in groups- there are no stupid or silly questions. I want this to be a place where you can have your questions answered and many times, we will have to find the answers together, so can we all agree

on this rule? What rules do you think are important to have as a group? (Take answers and write them down. Be sure to cover confidentiality of information shared with you and with other group members. It is also important to ask students if they wish for you and others in the group to acknowledge them on campus if seen outside of group.)

Thank you for sharing your thoughts and concerns. I will be sure to type up this list of group rules for our next meeting so everyone can have a copy. We are going to take a short 10 minute break and then come back for the rest of our activities for the day.

Transition: 3 minutes. Thank you for coming back! I was hoping group rules didn't scare you off. While you were out, did anyone think of another rule they wanted to bring to the group before we transition to another activity? (*Take answers if there are any.*)

Pair and Share Activity: 20 minutes. Next, let's think back to childhood, early, early childhood and try to remember the very first job we wanted to have or pretended to have when playing with our friends or siblings. We are going to write this job or career down on a piece of paper and then list every other job considered in the past (Remind students of their definition of career). Think about the good, the bad, and the bizarre- anything you have wanted to do if only your interests mattered! You may want to consider the jobs of people you admired growing up or things you have seen on television or in the movies. Write down any job you were curious about. I had a friend who was interested in how buildings are built so he learned about the process and now is a civil engineer. I remember the time I wanted to be the person who made Barbie clothes! (Insert your own

funny career story here). Let's take about 5 minutes to do this. Feel free to use pens, pencils, or markers for your list. *(Have students begin list. Monitor students by walking around the room, reading lists, and making verbal comments about each student's list as they are writing. Feel free to ask students how they became interested in unique careers, comment on others in the group who have similar occupations, and how interesting students' lists are. If you feel comfortable, share other students (do not give names) you have worked with who you considered certain options or people you know who do that job. Some students may have difficulty thinking about options, ask them to think about people in their community who they respected or careers on television that they saw and admired. You also might want to ask if they have read anything in a book they were curious about. As the facilitator, you could also consider videos or websites about careers. See resources list for more ideas. Try to find students whose lists are similar so they can be paired together later.)*

Now, let's pair with a partner to share your lists and learn more about each other. Feel free to ask your partner questions about their past interests or something you are curious about. Once you have had a chance to talk, we will each introduce our partners to the group and tell us one interesting job they have considered or something interesting you learned about them through your conversation. *(Assign student partners based on earlier observations. Allow students about 7 minutes to share lists and ask questions. If conversation lulls early, feel free to end early.)*

Okay, let's go around the room and have each pair introduce themselves and one interesting job/career they heard about or something interesting they learned about their partner. *(Allow time for students to share.)*

Group Process Questions: 10 minutes. What was it like to have to write down your list?

Did anyone notice any patterns in their jobs? If so, what were the patterns? *(If it doesn't come up in discussion, ask the group if anyone noticed that one of the jobs on their list was something their parents or someone they respected in the community.)*

Where did these ideas come from? What was it like to have to share those former potential jobs or careers with someone else? When you got to the end of your list, was the last job related to the career you were thinking about pursuing when you came to college? What led you to reconsider this occupation? What thoughts and feelings are coming up for you right now as we talk about those last occupations?

Transition: 1 minutes. Before our group began, you were emailed to bring a list of the names of your parents or guardians, your close relatives, other family and the jobs they have held. Let's take this out and we are going to create something called a career genogram.

Career Genogram Activity: 20 minutes. Has anyone here heard of a genogram before or created one? If so, what is it? Take answers. A genogram is like a family tree, but a career genogram is a little more than that. It's not only a family tree, but it includes the jobs your relatives have had.

For this activity, we are going to create a career genogram using symbols to represent the people in our family. Squares will represent males and triangles will represent females in our family. (You will want to draw this on a board you talk through the exercise.) We will start with grandparents, placing both sets at the top of our page. Individuals who are married are connected with a horizontal line. If they are divorced, draw a slash. If people have a relationship that creates children but are not married, we can connect them with a dotted line. Any children from any relationship are represented with vertical lines coming from the horizontal line. These lines down will connect to the squares and triangles that are your parents, aunts, and uncles. From there, you can represent their marriages and children, including yourself! If someone is deceased, you can shade in their symbol. When you are done, write beside each person the jobs they have held. There are plenty of markers, glue, precut shapes, and paper so feel free to use any of it. *Give students about 15 minutes to complete the project. Walk-around to answer any questions students have and to monitor their processing of the information. Ask students to process any themes of employment.*

Process and closing: 5-7 minutes. One thing I would like for you to take away from today is something we will also talk about next week. Take a look at your career genogram and think about your previous list of career ideas. In pairs, let's discuss Are there overlaps in your interests and someone in your family? Where could some of your career influences have come from? When you think about a future major or career, what things are going to be important for you to consider and why when making that decision?

I will write these questions on the board (or chart paper ahead of time) to help with the discussion.

We have had a pretty busy day today. Most days will not start with assessments like today did. As we begin our closing, can we all share a little bit about our genogram and something we are taking away from this activity? (Allow students to share.) We are going to place these genograms in a folder specifically for the materials we talk about in our meetings and any notes or thoughts you have after the meetings. Feel free to decorate these folders; they are yours. I only ask that you bring them to every meeting so that we have our activities to reflect on. We will start next week with more discussion around our genograms.

Day 2: Values and Mentoring

Goal: To begin identifying values that influence important decisions in participants' lives, to explore the values that are important to the participant when selecting a future major and career, to explore the values that are important to significant others in the participants' lives when the participant selects a future major and career, and to hear from other FGCS who have been successful in college to increase vicarious learning experiences.

Objectives: By the end of this session, the students will be able to identify what values will be important when choosing a major or career, identify supports and barriers that may get in the way of earning a college degree based on reports from mentors, begin developing a peer support network with help and advice from mentors, and begin to understand what they may be able to expect from the college transition.

Materials: Markers, pens, pencils, white paper, chart paper, computer for each student if possible (if not, values card sort for every participant or one set for every 2 participants)

Procedures/Time Allotment:

Opening: 5 minutes . Welcome back to the group. How has everyone's week been going? (*Take answers.*) Last week, we talked about careers we have considered in the past and the careers of people we know. Please take out your group folder and take a look at your career genogram. As you look at it, is there anything that strikes you?

Anything that you notice looking back? *(Take answers. Ask students about themes. Suggest students write observations and themes on the back of their genogram. Point to common themes in students' genograms. Point out that individuals are all trying to do something different from what their families did. Ask if they had a chance to talk to family members about the genogram.)*

Warm-up Activity (10 minutes) .So last week, we had an assignment, something to think about after we talked about past careers. I would like to start there today. So let's do a warm-up activity. Let's get out a piece of paper and start brainstorming. There are a few questions written for us to answer. Let's free write...just write what comes to your mind when asked the following questions. I have them written on the chart paper here for your reference. (Have questions prewritten on chart paper and placed in front of the group so all group members can see. Read the questions below out loud.)

Why did you decide to go to college?

Why was this decision important to you?

Was this decision important to anyone else in your life? If so, who and why?

Let's take about 5 minutes to work on this.

(Walk around while students write answers. For students having difficulties, prompt them by asking questions like...what did you hope to happen when you came to college? Did other people in your family play a part in your decision? What about friends or a

significant person in your life? What did your high school teachers say? What are some hopes you and others have when you graduate?)

Let's come back and share what we have. What were the one or two most important reasons why each of you decided to go to college? *(Let every student share.)* Were there any important people who played a part in this decision? How? *(Take answers. Be sure to check in with the group to ask if anyone else felt the same way or had the same people down for the same reasons.)*

Now, let's think about another question that will help us transition to today's topic. The ideas and people who played an important role in your decision to go to college, will they also play an important role in the major and/or career that you choose to pursue? *(Let students consider this....if students immediately respond yes or no, ask them why or why not? Follow with* It's important to also explore our expectations of self and people's expectations of us as a way to explore our values. What is expected of you from significant people in your life when you think about college and choosing a major or career?

Once discussion has died down ask: When you think about a future major or career, what things are going to be important for you to consider and why when making that decision?

Let's stop and consider this question for a minute. Let's take some time to make a list on a piece of paper to think about this. It could be the most important thing for you is finding a subject you are interested or a subject that will lead to a career where you can

make a certain amount of money. Some people choose majors where they know they will study and work with people; some people choose majors based on what their friends are studying. And there are some people....who choose majors and careers based on things they don't want to do. (It may help to share a person story about why you choose the college major or career that you chose...for instance, to avoid math and science or to not have to read a lot...the more humorous the better.) In a way, these are things that are important to you when making choices are values. It's important to know what you value when making decisions whether it be about the decision to go to college, the decision on what to major in, or even deciding where to work when you graduate. We are going to explore what's important to you. So I am going to give you some time to write down the things that are important to you when choosing a major or a career. Close your eyes. Picture yourself studying something you really enjoy . What will you be doing? Reading? Using your hands to solve something? At a gym? Learning about people? Working with people? If you can, picture yourself in the perfect work environment. Will you be outside? Inside? At a desk? Will people be around? Will you use a computer? What would you like your daily interactions to be like? Let's take about 7 minutes to work on this and then we will come together to talk. *(Walk around while students are writing. Encourage them to make a list of possible things they value in a major...flexibility, working with people, less writing, more math, less math...and a list of career values.)*

Let's come back together and talk about this. When thinking about a major, what values did you come up with for yourself? (*Take answers.*) Did anything surprise you? (*Take answers.*) What was the hardest part about making your list? (*Monitor answers. This will be easy for some but harder for others who have never explored values. Point this out: it's hard to know what you value when you haven't had experience with choosing majors and careers.*)

Values exploration can be one of the hardest or easiest parts of major and career exploration as sometimes we haven't been put in situations where we know if a value is important to us. It's also hard to think of things off the top of our heads when asked what we value. Now that you are thinking about things you value in majors and careers, we are going to do a more structured values activity. This will hopefully help you to think about other values that are important to you in your search.

Values Sort: 17 minutes. So, what we are going to do for the next 15 minutes is a values sort on the computer. You will be given a value statement and asked to rank whether this value is something you always value in a career or major, often value, sometimes value, seldom value, or never value. You don't have to know an exact career title in order to think about what you would value in your future work. At the end of the assessment, you will be shown a list ordering the values into categories based on your responses. Please print this out so we can discuss this as a group.

Alternate instructions if computers are not available

For the next 15 minutes, we are going to do a values card sort. Each of you will take a deck of values cards and categorize them in piles according to those you always value in a career or major, often value, sometimes value, seldom value, or never value. Try to only have 5 items in the always value pile; this may mean trading cards out. When you are done, write your answers down on a piece of paper. Your paper should have 5 columns representing each category and each card should be placed in a column.

Questions? *(Walk around to check for understanding. You may need to give examples for some of the word choices. Some students may say they are having trouble as their value depends on the situation. Ask these students to consider what they will need to consider when thinking about their perfect job, something they can't live without, or what they would do the majority of the time. It may be helpful to remind students of the conversation regarding choosing a college. What values went into play then? Are these still important when choosing a career?)*

Process Questions: 15 minutes. Let's talk about what your assessments said. To do this, I want you to write your top 5 values on a piece of chart paper to hang on the wall. Write your name and top 5 list on the paper so we can all see everyone's values. If you didn't have 5 in your always valued list, you can choose from the often valued pile. I am going to ask you to tell us your values, what this means for your career/major choice (how you may use this), and why this is important to you. *(Give students the chance to*

write down their values list and place on the wall. Encourage students to look at the lists of others.) Now, let's go around and talk about their values: what they were, why they were important and what this might look like when you choose a major or career. (Have students discuss and ask questions. Ask clarifying questions for values like prestige, financial stability, job security- anything were students may need to have a quantity in mind or the value could mean different things depending on your worldview.)

It sounds like we are all understanding a little more what is important to us. When we think about choosing a major or a career, considering our values can help us choose between difficult choices or let us know if something is right for us. Understanding our values can help us understand what we want from our careers. We are now going to take a 10 minute break and when we come back, we will have a guest panel of first-generation college students who are Seniors or who have graduated talk to us about their first two years of college and their choice of majors.

Panel Discussion (50 minutes). Select 4-5 first-generation college student Seniors or recent graduates to come speak to the group about their first 2 years of college, particularly their major choice process. Preferably, this group would consist of males and females that mirror your career group ethnically and who struggled with choosing their major. Brief the guest speakers early about the nature of the group. Ask them to share their experiences on campus, any confusion they had, and how they chose their major. Ask them to relay any fears they had regarding major/career choice, family

concerns, pressures, values, and expectations. Finally, secure their willingness to be mentors to the group participants in the future.

Introduce guest speakers, have group members introduce themselves, and ask the guest speakers to tell their stories. Ask follow up questions such as:

What was it like to not know what you wanted to major in? Who really helped you on campus when you were confused? Who helped you through your major choice process? What did you take into account when choosing a major? What did your family and friends say? How did you talk with people about wanting to change your major? What “advice” would you give to a first-year student starting off at UNCG about choosing a major? Let the students ask questions as well. Open the last 10-15 minutes of panel discussion up to group members to ask questions of the group (if they are not already asking questions).

I have asked the group members to share their contact information with you (emails) in case you have questions about things going on around campus, things you should be thinking about, or you just need someone to talk with. For next week, we are going to brainstorm a list before group about what we liked in high school- either a subject, a hobby, a sport, band, interactions with others, a part-time job, a full-time job, anything that you enjoyed. Write down what it was and what you enjoyed about it. If there is something you have always been curious about and wanted to study, write that down. We are going to discuss this at our next group. *Allow group members and guest*

speakers to talk to each other and share information for the last few minutes of group.

Email group members in between group to remind them to bring list of high school interests to the next group.

*****Recruitment/Guest Speaker Prep**** Recruit first-generation college students who had changed their majors or considered changing their major during their college career and who have had the opportunity to reflect on their college experience. If you have not worked personally with the students you recruit to be mentors, meet with each student to help assist in their reflection of their college career and major choice process. This meeting could be part of the recruitment process. If possible offer incentives to your mentors as they are taking time from their schedules to serve as mentors. Some colleges may have first-generation college student mentor groups already established or leadership programs that try to recruit first-generation college students*

Day 3: Interests

Goal: To explore major and minor options on campus

Objectives: By the end of this session, students will be able to name majors on campus they are not interested in and majors they would like to explore further. Students will also have an understanding of how the Undergraduate Bulletin can be used a reference tool for major exploration.

Materials: Highlighters, Undergraduate Bulletin (or access to this online), scissors, paper, tape, list of majors for each student (with minors or concentrations if possible), glue

Procedures/Time Allotment:

Welcome and catch up (2 minutes). Today's goal is to explore the possibilities available to you in a major here and what that could mean later down the road. There are _____ majors here on campus (fill in blank for your campus). Knowing what they all do and what classes in these majors are like can be hard. So, let's start with exploring what you are interested in.

Career Interests 45 minutes. Let's all take out our lists of interests from high school we were to write down between groups. Think about what subjects really interested you. How did you know they interested you? What about them seemed cool? When you heard the name of a subject, did you immediately think- yeah, I am going to love Civics

or Pre-calculus or (insert students' favorite subjects here)?! Did you have another reaction? *Take answers.*

Could someone tell us something you enjoyed in high school? What was it you enjoyed about this? *Give all students an opportunity to share.* Now, let's brainstorm possible college majors that could possibly fit each person's high school interest. Now, I want to go ahead and say that just because you were interested in something in high school, that does not mean you will necessarily be interested in that same thing in college. Also, college is a place to try new things, so I would encourage you to think about all the new things you are interested in and would like to explore while you are in college. That being said, it can be really hard to look at a list of college majors and fully understand what each major is and how it relates to what you are interested in. Hopefully, we can help each other with that. Write down any suggestions anyone has for you. You may need this later today. *(Have each student share interests again but have other students listen this time for majors they have heard of that could be related to this. This will take more facilitation skills. Prompting group discussion with questions like...has anyone taken a class like that here? Have any of your friends talked about classes or programs like that here? Provide help or suggestions if needed when students are stuck.)*

Can you see how your interests might have a connection to a college major? If you don't, it's okay. It's also easy to see that some majors have a clear connection to a job, for example and Elementary Education major will most likely be an elementary school

teacher. But what would a History major do? In reality, History majors may end up as writers, business people, bankers, and the list could be endless. Today, we are not going to focus so much on the jobs we could have with each major, but what we would learn about in each major. The next part of our group may help clarify how interests and majors could be connected. We are going to take a look at a short list of college majors and group them into categories together. *Show students list of 10-15 majors offered at your college that can be divided into groups. Think about obvious major groupings (Physics, Biology, etc. as sciences) and not so obvious groupings (History and Sociology as social sciences or majors where you study people).* Let's think about what these majors may have in common and what makes them different. Can we come up with any distinct categories for majors? *Help students group majors according to categories. There may be more than one way to group majors so let students process. Write groupings on chalkboard or on chart paper.*

We are going to take a short break (5-10 minutes depending on the time it took to go through interests) and then when we return, we will explore majors here that you may be interested in.

Break

Major Exploration Activity 7 minutes. Did anyone have a chance to think about the things we discussed before the break? Any thoughts about interests you would like to share or about the major groupings? Any questions?

I have made major sheets for all of us to look through that lists the majors and minors offered here on campus. *(Take time to explain what a minor is and how it can be useful. Some schools have “concentrations” or “focus areas” so be sure to know what your school offers and how this relates to majors offered on campus.)* We are going to take our list and with a blue highlighter, and each of us will highlight the majors you are interested in. In yellow, highlight all the majors we don't know a lot about or words we may have never heard of. It may be helpful to write down what you think majors are, even if you think you know. If there is a major you have been thinking about, but don't see, write this down too! I have written the directions on the board for you as well. We will have about five minutes to do this and then we are going to take that list and use it for our next activity. *Give students time to work through major sheet. Check in with each student to be sure they truly understand differences and purposes of majors. You may need to highlight some majors in yellow for students if you sense they don't fully understand the scope of a major.*

Process Questions 3-5 minutes: Were there any words or majors you had never heard of or didn't know they existed? (Take answers.) What do you think these mean? *Take answers.* Did anything surprise you? (Take answers.)

Undergraduate Bulletin Exploration Activity. 30 minutes: The last part of our group today will be require us to work a little independently to learn more about the majors and

minors here on campus. We are going to explore these and make a list of majors that interest you. You will have a little time to look through the undergraduate bulletin.

Now, this is a really cool tool that the college makes available to everyone online and on paper (your college may only have one or the other, not both). We are going to look through the online version. This is a huge document, so I want to take time to explain how to use it and navigate through the pages. (Demonstrate on a computer screen or projection of computer screen). The website has a place where it lists all major offered at our school. You can click on a major and learn what it's about. BUT, you can also search through the courses offered and find out a lot more about the major and what it's about. We can learn a lot about a major by the classes they would require us to take. If you see something that interests you, write it down! What I hope you will do is to look through every major and the classes offered, but I realize a) this will take a while and b) there may be some majors you just know you don't want to do. If you prefer, you can go through the list of blue and yellow highlighted words to get a broader understanding of these majors. Take a blank piece of paper and divide it into 4 columns: Majors I am interested in, Minors I am interested in, Majors I might like, and Majors I don't like. As you learn more about the majors, cut out the majors and glue them in a column. I will be walking around to answer questions and just to chat with you about what you are finding. Please ask questions! This is probably everyone's first time looking through this so I want you to ask questions. I want to hear what you have to say. Talk to each other about what you are finding and questions you have. (Walk-around room to make sure

students are understanding what they are reading and to make sure they are searching. If you have access to paper bulletins, give each student a paper copy to write on and work with. If there are not enough computers for everyone to have a separate computer, let students work in groups. Students may need time to complete this activity at home if there are a great deal of majors they are interested in.)

Group Process. 5-10 minutes: We may not all be finished, but let's come together to talk about what you have found so far. What did you guys learn about majors and minors on campus? What there anything surprising? Anything you didn't know? Do you want to know more about other majors? (Process through this experience with students.)

Closing/Next week. 10 minutes: What's interesting, each department has a website. So, if you are interested in learning more about a major or minor, you can go online to read more about the major, who teaches in the major, and what they are doing. You can also find faculty members and advisors to talk with about the majors. *Show students on the computer how to do this. They will need help learning how to navigate a departmental website.* Between now and next week, let's finish the sorting activity and look a little more into each major placed in the Majors I like column. You could do this by looking more at the catalog or by going on the website of the major. This is a big job and could be a little overwhelming so let's work in pairs together over the week to get this done. *Facilitator should pair students based on support systems already established in class.*

Not only are we going to finishing sorting the majors, but we are also going to try to find

someone we could talk with about the majors we are interested in. Just write down the name and email of this person, you don't have to contact them. I am available throughout the week to help if you run into difficult or need extra help. We will talk later about contacting faculty and advisors and work on questions to ask them. If you would, send me an email letting me know the majors you have been considering two days before our next meeting. I will send a reminder email to you during the week. Don't forget to put your majors list in your group folder once you are done. You may also want to talk to your mentor about majors you have found you like or to get advice on majors.

Day 4:

Goal: To discuss barriers/supports, campus resources, and goal setting/decision making

Objectives: By the end of the session, students will be able to set structured goals and an action plan to achieve those goals. Students will be able to identify relevant barriers and supports to their college success.

Materials: Paper, pens, markers, chart paper or board

Procedures/Time Allotment:

Introduction.8 minutes : Welcome back everyone. Let's check-in to see where we all are with our major exploration. Last time, we looked through the Undergraduate Bulletin to find majors that may interest you. Over the last week, you looked up more information on the majors you were interested in. Did you find anything interesting there? What did you learn? Was there anything that really excited you or turned you off from a major?

Remember, you don't have to commit to a major today, we are just in exploration mode.

Take time to process. Today, we are going to talk about the majors you are interested in, campus resources that can help you further in your academic studies and in your major search, and setting goals to achieve what you want.

Transition: 2 minutes. Being unsure about what you want to major in through college or being unsure about what careers you are truly interested in can make you feel _____(use students feeling answers from above). For some people, it could even make them

question why they are in college and what they are doing here. The confusion could make them doubt yourself or feel frustrated. So, with all this confusion, how do we begin to find answers? Well, let's think about how you make important decisions. You've probably made tons of important decisions in your life- probably some of those decisions didn't seem so big at the time- but how many times have you stopped to think about how you came to those decisions? What steps did you take to make those decisions? Did you talk to anyone about your decision to get help or opinions? If so, who? Let's consider these questions.

Decision-Making Activity: 12 minutes. To do this, we are going to make a decisional timeline with an important decision we all share- the decision to attend _____(name college or university where group is being held). I am going to give you another piece of paper and what I want you to do is create a timeline of how you made the decision to attend _____(college). Start with the decision to go to college first, then each mark on your line should represent an event that led to the decision to attend _____. Include anything that is relevant. For instance, my first line to start my timeline would be "parents told me they wanted me to go to college" (*Demonstrate this on a piece of paper*). My second mark would be "talked to friends, Sarah and Ben, about where they were applying", another mark for "checked websites to find out what majors each college offered" , "visited colleges" and I would continue making marks on my line until I reached the decision to attend _____. Write down why this college appealed to you over

the others you were considering. Was it location, family in close proximity, or the feel of the college that led you to pick this place?

Let's take about ten minutes to work on this. Again, use anything in the room to make your timeline. *(Walk around the room to monitor student progress. Ask questions to make sure students are being thorough and clear so they have enough information to determine who they make decisions. Be watching for phrases like "narrowed down choices"- ask students to clarify what went into this process. How did they narrow it down? Ask them to elaborate on their timeline. If they write "talk to people" ask who and what information they were hoping to get from these people. Towards the end, you should see enough on each student's timeline to be able to make comments regarding how students make decisions. For instance, "you like to talk to your family and people close to you when making decisions" or "it looks like you try to do as much independent research as possible before making decisions". Note any similarities between the group of students.)*

Group Process: 10 minutes. I noticed that a lot of you _____(comment on similarities). Raise you had if you had that or something similar on your timeline. *(Continue with at least 3 similarities between the students in the group.)* Who has something else? If you look at your sheet, is there anything you notice about how you make decisions? Is there a particular person you rely on? Is there a process you used? *(Ask each student to comment on their decision making process).*

It's important to keep these things in mind now that we are talking about another really important decision you will have to make. Maybe you heard something another group member did and you want to add this to your process to help you decide on a major or career. If so, write it down on this sheet of paper to keep in mind.

Break

Goal setting introduction. 10 minutes: Let's think back to a time you set a really important goal and achieved it. Take some time to think about it. How did you decide on the goal? What did you do to achieve it? What were some things that could get in the way of you achieving the goal? *Have students think for a second and then process through how they developed and achieved their goals. Help students break down their goal directed actions into tasks they performed to obtain the goals. Inquire about internal thoughts regarding the tasks and goals. Also inquire about the opinions of family, friends, teachers, or significant others in the students' lives that either supported the individual or possibly said the individual couldn't do it. Keep in mind that FGCS may have had to overcome barriers and obstacles to college attendance so goal setting could bring up stressful emotions. Students also may not have set goals and are in college pursuing a parent's goal. Point out students' strengths and achievements overcoming diversity.*

If you had to teach someone else how to succeed with a goal based on your success, what steps would you take to tell them how to accomplish the goal? *Have students process*

this. Encourage them to come up with a step-by step success plan for other students to accomplish goals they set.

Now, let's think about a few goals you have for coming to school here. Let's name a few and we will list them. *Let students talk through goals and come up with a list of 5-8 goals students have for college. Write these goals on chart paper or a board.*

Goals need to be developed in a way that let us know what we are trying to accomplish, when we plan to do this or how long it should take, and how will we know we have reached our goal. What evidence will be present so we know we are done? Let's look back through our goals. Should we change any of them to make our goals more clear?

Goal Setting Activity Guided. 30 minutes: What would it take to accomplish these goals? We are going to take two of these goals and really break them down into the things we would need to do to be able to accomplish this goal. Let's think about accomplishing this goal as winning a race. We have a goal at the end, but along the way, we have these hurdles we have to jump to get where we want to be. *Draw picture of race scene from appendix as you go over each visual.* Let's choose one to start thinking about this race. *Have students choose the first goal they want to work on. The objective is to have clear, easy to accomplish steps so that students can see the steps involved in accomplishing a goal. Write on board or separate piece of chart paper.* Now, let's think. What steps or hurdles would we need to jump over to make this happen? *Write steps on another sheet of paper or beside the race visual and allow students the opportunity to number the steps*

in the order they will need to accomplish them. Write down steps students suggest on the race scene as hurdles on the track. It will be helpful for students to visually represent these on the track in the order they will need to jump them to complete the goal.

But, we aren't running this race in an empty stadium- there are people watching us. In the stands, we have people who are supporting us and cheering for us. Who will be supporting you while you attempt to reach your goal? Who are your fans watching the race? Will your family, friends, or anyone else be supportive of you? *Ask students to name people who they find supportive in their life. Write these down on race scene as people in the stands. Be sure to visual representations of people and write names for each of them. Examples of supportive people are names of friends, parents, high school teachers, faculty, etc.*

There are people who maybe doubt whether we can finish, are cheering for someone else to win, or don't even want us to start the race- for different reasons. Unfortunately, we often hear the people who aren't as supportive of us the most when we are close to reaching our goal. Do you think anyone or anything will try to get in your way when you are trying to accomplish this goal? Is there anyone or anything you could consider a barrier to accomplishing your goal? Who or what might not be ask supportive of you? *Write these down on race metaphor as others in the stands. Be sure to visually represent the barriers as race watchers closer to the goal line. Examples of barriers could be names of high school friends, family, faculty, policies, time, finances, etc.*

Now, let's think. What do you need in order to jump these hurdles? Think about these like water when you are running a really long race. It helps to have water bottles during the race to help us give us the power and energy to keep going. Campus resources and the things you do to stay focused can be kind of like water bottles- just depending on when and how you use them. Are there people who will help you? *Write down what students say and represent these as bottles along the raceway. It will be helpful to suggest a few based on the students goals and steps need to achieve these goals. For instance, students may need campus tutoring, the writing center, or their academic advisor depending on their goal.*

When the going gets rough and things get stressful while trying to accomplish your goal, what do you do? How do you stay focused? Do you talk to a friend? Do you exercise? Do you make lists? What helps you? These can also be water bottles during our race. *Draw focusing strategies as water bottles along the race route as well.*

Today we are going to talk about the goals you want to accomplish while in college. We are going to break down each goal into manageable steps just like what we did with the race and talk about how to reach these goals. We will also work to find people who can help you reach these goals.

But first, what have we forgotten about? *Take answers from students. Try to relate what they say to something already in the race metaphor. Try to elicit from students that*

the runner (they) are missing from the race. If needed, draw the runner at the start of the race to get students thinking. .

So, we need to think about us in the race. First, we have to show up to the race! If we aren't ready for the race we can't expect to finish, just like if we aren't ready to do the stuff to reach our goal, we won't get there. But, if we aren't prepared for the race, if we aren't wearing the right clothes or shoes, the race could be harder. What do we bring to this race? How can we better prepare for the race? *Let's students think about this for a while and discuss. Prompt students to think about past experiences they bring to the race, intelligence, self-confidence, etc.*

Goal Setting Activity Individual.20 minutes: How do we finish our goals? What will get in the way to finish our goals in college? Let's choose one goal for college. Maybe it's to pick a major. Maybe it's to pass English class. It could even be to get a part time job. We are going to think through what we need to do to accomplish these goals. Let's take the goal we have in mind and work through the race scenario by drawing out the race like we just did with the ____ goal (repeat goal just worked through in group). *Hand out paper.* Start with the goal. Think through the steps you need to reach your goal and make those the hurdles. It may help to write it out before you draw, but you may be able to do it without. I am going to walk around to help as you think through your goal. *Give students the chance to work through the race metaphor. Students may struggle most with wording goals to include the behavior they wish to see and how they will know they have*

accomplished this, breaking down their goals into steps to achieve their goals, thinking of campus resources that could help, and identifying things they bring to help achieve their goals. Once students are done, ask them to gather together to discuss their process.

Process questions. 5-10 minutes: What was it like to plan out how you were going to accomplish your goals? Was it easy/hard? What was the hardest part? How many steps did it take to reach your goals? Did anyone have trouble coming up with supportive and not supportive people? Did anyone find that a person could be supportive at the beginning of the race but not supportive toward the end? Did you find that you needed something to accomplish your goal that you didn't have?

It can be helpful to think through the things we want to do so a) we know how to get there and b) so we can predict what might get in our way. We also talked about decision making and how we have made decisions in the past. Next week, we will talk about well...how we talk to people and how to communicate to others. Over the break, think about what barriers, worries and concerns you have about achieving the goals you have set for college. Make a list to bring to our next group. I will email you to remind you to bring the list to our next group.

Day 5:

Goal: Discuss barriers and anxieties, coping mechanisms (e.g., mindfulness), effective communication and wrap-up group

Objectives: By the end of the session, students will be able to communicate effectively with family and faculty on campus as well as list coping mechanisms when they get stressed.

Materials: Assessment packets for each student, paper, markers, pens.

Procedure/Time Allotment:

Introduction. 5 minutes. Today is our last group so let's take time to talk about our goals and what may be holding us back, some ways to cope with the stress we face, and what the group has been like. Last week, we talked about goal setting and how to accomplish our goals. Did anyone have a chance to think more about their goals or to begin taking the steps to work toward their goals? (If yes, ask what they did and how it worked out. If no, ask what stopped them. Process through what is holding them back.)

Communication. 30 minutes : Let's talk about our list of barriers, worries, and concerns we have for accomplishing our goals. It's natural to think about things that may stand in our way or to think we don't have the time to do the things we need to do. Like in the race, barriers can be overcome – they are not walls, they are hurdles. What worries you?

Have students talk through what they are concerned about. Inquire about possible

barriers, low self-efficacy, low self-esteem, guilt, etc. Draw ties to students concerns to help students ease feelings of isolation.

We have a resource list in your packet, to help address some barriers, but there may be more for you. What's one support person or resource you could use to address your biggest concern/barrier?

What's it like to talk to us about your concerns? *Take answers.* Have you talked with your family or friends about your worries? When thinking about talking to parents, friends, or just about anyone, it can be helpful to really think through your feelings around talking to them and what you hope to happen by talking with people. What do you need from them? Do you need an answer to a question or just support?

Two weeks ago, you looked up the websites of the majors you were interested in. You found the name of one person you may be able to talk with about different majors. Have you thought about what you are going to say to them? *Have students process through questions.* It could be easy to be really nervous talking to this person because they could be older than you, they have knowledge that you want, and they may be faculty or staff in a major you are really interested in. So, let's think through this. How do you feel when thinking about talking to them? What's your biggest fear, if there is one, about this conversation? *Process these.*

Now, let's think, what do you want to know? Let's think through a list of questions that we want to know and write them down. *Take answers. Make sure students are covering*

the knowledge they would need in order to make an informed decision about the major...what will I learn, how many classes, will I be behind and how long, what kind of careers can I have? Talk with them about how they could organize these questions.

Role play. 10 minutes: Let's take some time to role play with each other how we would talk with the person in the majors we are interested in about what the major is about. Let's pair off and take turns asking our questions and getting answers...the answers don't have to be right, but let's practice with each other. *Take some time to let students role play.*

Process Questions. 5 minutes: What was it like to talk through your questions with someone else? Did you find it easy or hard to come up with the words to say? Have you spoken to anyone about deciding on or changing your major? What did they say? When you think about talking to your parents about changing your major, how do you feel? What goes through your mind? *Allow students to process questions. Ask students what they can do to prepare for conversations with parents. It may be helpful to prompt students with things like...my parents wanted me to do something that made a lot of money, but people in my major don't make a lot of money. It can also be scary because we are worried about what they will say. Will they be disappointed? Will they even understand what I plan to do? Student may want to consider brainstorming questions parents will have and how they can handle those.*

Effective Communication Continued. 10 minutes: A good place to start this conversation could be to just be honest about how you feel. Be sure to use “I” when you are talking. So, I would say...I am really worried about talking to you because I am not sure how you are going to react or When I was a chemistry major, I felt really out of place because I didn’t like science and I didn’t understand what the professor was saying. Let them know what you have been thinking about and why. Thinking about your new major makes you feel how? And then, let them know your plan. If you know a potential career that you want to pursue with the new major, let them know that. If you don’t know of a career, let them know what plan you have for deciding what you want to do. Let’s take some time to think through what you want to say. Let’s get back in our pairs and talk through what we are going to say. *Give students time to talk through. Monitor their conversations to be sure students are clearly communicating their feelings and what they are thinking about majoring in.*

Mindfulness/Breathing. 30 minutes: Talking to people about our feelings could be stressful and cause us worry or experience places of discomfort in our bodies. What kind of things do you notice happening in your body now after the role play? Notice hands sweaty, flushed, nervous? Are there any place of tightness, fullness, or queasiness in your body? *Take answers for each question.* Take a moment or to be bring awareness to how you are feeling and any sensations in your body. What are your thoughts?

We are going to take some time to talk about using breathing techniques as a way to slow down and relieve stress from our bodies. When we get overwhelmed or stressed, it's easy for our breathing patterns to change and for our breathing to actually get shallow. Shallow breathing could lead to our bodies not getting enough oxygen and even becoming more stressed. Let's take some time to focus on our breathing. Bring your awareness to your breathing. Do you breathe through your nose or your mouth? Does your chest move up and down? *Take answers.*

We are going to practice breathing from our diaphragm as this type of breathing actually allows you to take fuller breathes and has shown to relieve some of the tensions and stress in your neck and shoulders. To start practicing breathing from your diaphragm, place one hand on your chest and one hand on your stomach. Breathe in through your nose and as you do, try to make your stomach expand out and try to keep your chest still. In proper diaphragm breathing, your chest should not rise. Breathing should expand your stomach. Now take the hand on your stomach and move it to your back. You should notice your back and sides expanding out as you practice diaphragmatic breathing. Practice this for a minute. *If the facilitator needs help understanding or practicing diaphragmatic breathing, see resource list for clips on breath training.*

Now, either sitting or standing, we are going to practice a breathing technique that could be helpful when we are feeling stressed or anxious. While doing this exercise, practice good diaphragmatic breathing. Feel free to close your eyes if needed. Now, as you

breathe in, count to four and as you breathe out, count to eight. Breathe in for 4, out for 8. *Have students do this for four cycles.* Now, when breathing, breathe in a calm color, whatever that color is for you. It could be a favorite color. When you breathe out, breathe out a color associated with anxiety, worry, or stress. Picture breathing in the calm color throughout your body for 4 and your stress color for eight. *Have students practice this for a minute. Remind them to practice diaphragmatic breathing.* Next, breathe in for 4, breathe happy thought, calming, positive. Breathe out negative thought for 8. *Have students practice this for another minute.*

Process Questions: How did it feel to breathe this way? Did you notice any difference in your body? Was this helpful? What are our thoughts about this activity? *Have students process each question.*

Let's take a quick five-minute break and then we are going to transition into our closing activities.

Break

Group Process Questions. 10 minutes: Now that we are back together, I want to take some time to process where we all are with the decision about what to major in. Where are you in the process? Is there any more information you need to make this decision? If so, what? How can you get that information? What sort of things did you learn in the five weeks we have spent in group? Did anything surprise you? What was it like to talk to strangers about your thoughts and feelings? Leaving the group, is there anything you

worry about? Do you have more ideas about supports and resources you could use to address those worries? *Allow students to process questions.*

Let's take out your folder with all the activities we have worked on over the past weeks. Was there any activity here that has special meaning for you? What did you learn about yourself doing these activities?

Group Closing Activity. 15 minutes: We have all learned a lot about each other during our time together. I was wondering if we would all be okay sharing some of the positive things we have learned about each other. Now, we don't have to do it verbally, I was thinking we could all write down at least one positive word about each person or one memory from group about each person. What do you guys think? Here's what we can do. Everyone will get a sheet of paper to write their name in the middle of landscape style. Write your name as large as you want it. Then, we will pass around the papers clockwise. You will then have someone else's paper in front of you. Think about what you want to say to that person- one positive quality or one memory or even encouraging words- and then we will pass around the papers around clockwise again until we have written on everyone's paper. *Give students about 10 minutes to get through everyone's paper. Once the students' papers rotate back to themselves, give them a chance to read through them.*

Closing/Assessments. 25 minutes: I want to take the time to thank you all for participating in this group. I have a list of campus resources for all of you in case you

need additional help after the group is over. I have also included contact information for the person in your major you emailed me about as well as other potential people to talk to in the majors you are interested in. I have also included my contact information in case you have additional questions. Before we end, we do have to take time to retake the assessments you took at the beginning of our meetings. Once you have finished those, we are done! I will be here after we are done if you want to stay and talk or ask any questions. Thanks again for your participation. *Give packets out. This would also be the time to give any additional instructions to the group regarding contacting them after the group is over.*

Resource List for Facilitators

First-Generation College Student Concerns:

<http://www.firstgenerationfilm.com/> (A film following 4 high school students who would be the first in their families to attend college. The Resources page has some resources for students and to give facilitators more information about the first-generation college student journey.)

<http://www.firstinthefamily.org/collegetyears/index.html> (Provides testimonies from first-generation college students on peer support, culture shock, balancing work and school, as well as family responsibilities.)

http://www.counselingcenter.illinois.edu/?page_id=142 (A list of common feelings and concerns of first-generation college students along with tips for coping.)

Assessments:

Online Knowdell Career Values Sort:

<http://www.stewartcoopercoon.com/jobsearch/career-values/>

To order Knowdell Career Values Sort Sets:

<http://www.careertrainer.com/trainingsys/career-values-card-sort-knowdell-cards-ff80808117d194ac0117eb2af71f044d-p.html>

Career Resources:

<http://roadtripnation.com/> (Motivational videos regarding unique careers.)

<http://uncw.edu/career/WhatCanIDoWithaMajorIn.html> What Can I Do With a Major in?

<http://www.myplan.com/majors/what-to-do-with-a-major.php> (Lists first and second tier jobs related to majors.)

https://www1.cfnc.org/Plan/For_A_Career/default.aspx College Foundation of North Carolina's career planning and exploration site. Students can take career assessments, learn about different careers, and compare job growth.)

<http://www.bls.gov/ooh/> Occupation Outlook Handbook. Profiles of occupations across the country.

<http://www.onetonline.org/> O*Net website. Gives descriptions of jobs, skills and education needed, as well as average salaries.

Diaphragmatic Breathing:

http://www.youtube.com/watch?v=_7ySGgAFAAo

http://www.youtube.com/watch?v=8-_NNCrrdus

Student Resource List

UNCG Campus Resources

Academic Advising:

Academic Advising Home: <http://advising.uncg.edu/> (Main home page to locate advisor)

Student's First Office: <http://studentsfirst.uncg.edu/> (Specific to undecided or students exploring new majors)

Career Services Center: <http://csc.dept.uncg.edu/> (For additional career counseling, job hunt and resume help, or career assessments)

Counseling and Testing Center: <http://studenthealth.uncg.edu/ctc/> (For emotional support on campus)

Dean of Students Office: <http://sa.uncg.edu/dean> (Assists students in distress through advocacy)

Tutoring:

Student Success Center: <http://success.uncg.edu/index.php> (Houses study programs, learning assistance programs, tutoring, and special support programs.)

Special Support Services (A program for first-generation students. Must apply to participate.) <http://success.uncg.edu/sss/>

UNCG Writing Center: <http://www.uncg.edu/eng/writingcenter/default.php> (For help with writing assignments)

Online Career Resources:

Values Inventory: <http://www.stewartcoopercoon.com/jobsearch/career-values/>

<http://uncw.edu/career/WhatCanIDoWithaMajorIn.html> What Can I Do With a Major in?

<http://www.myplan.com/majors/what-to-do-with-a-major.php> (Lists first and second tier jobs related to majors.)

https://www1.cfnc.org/Plan/For_A_Career/default.aspx College Foundation of North Carolina's career planning and exploration site. Students can take career assessments, learn about different careers, and compare job growth.)

<http://www.bls.gov/ooh/> Occupation Outlook Handbook. Profiles of occupations across the country.

<http://www.onetonline.org/> O*Net website. Gives descriptions of jobs, skills and education needed, as well as average salaries.

APPENDIX G

PILOT STUDY INFORMATION

Pilot Study: First-Generation College Students Career Decision Self-Efficacy,
Vocational Outcome Expectations, and Commitment to Career Choices

Project Director: Dr. DiAnne Borders, Department of Counseling and Educational
Development, The University of North Carolina at Greensboro

Recruitment Script

You are being asked if you would be willing to be in a research study. We are trying to find out the thoughts people have about their ability to make decisions regarding career choices, their expectations around what will happen when they make a choice, how committed they are to the choice, and how open they are to the career search process. This study will also look at how effective you perceive some of your class career activities and interventions to be.

You have been selected for this study because you are a first or second year undergraduate student attending UNCG who is taking CED 210. This discussion and the piece of paper given to you will tell you about the study to help you decide if you want to be part of the study. You will be asked a series of questions that will help the researcher understand your background and perceptions. Additionally, you will be given the Career Decision Self-Efficacy scale to assess how confident you feel you can make a career decision, the Vocational Outcome Expectations Scale to measure your expectations if you choose a particular career, and the Commitment to Career Choices scale to assess your level of commitment to your chosen career and your openness to the exploration process. This will take approximately 20 minutes of your time. You will be given a packet containing all of the forms and scales mentioned and asked to complete this in class. This is voluntary and is not a requirement of being part of this class. Your instructor will not be given access to your answers. There are no payments made for participating in this study.

The benefits to society by being in this study include enabling us to learn more about what students find helpful about the CED 210 course as well as what might not be as helpful when taking this course. We will also be able to learn more about the career beliefs and commitment of first and second year students which could help in the development of better courses and interventions to address these thoughts in the college setting. There are no direct benefits to you for participating.

The risks involved in this study are minimal. You will not be subject to any physical danger by taking part in this study. However, some of the scales may ask questions that could create some stress or anxiety if you are currently concerned about your career planning. No identifying information will be collected from you as part of this study therefore your answers to the assessments in the study cannot be linked back to you. If you experience uncomfortable emotional reactions please feel free to contact the Counseling and Testing Center at 336-334-5340. Due to the career related nature of these assessments, you can also call the Career Services Center at 336-334-5454 with concerns related to content presented in the assessment packet. If you decide you do not want to be in the study you are free to leave whenever you like without penalty or unfair treatment.

If you have questions, want more information or have suggestions, please feel free to ask now or you can contact Dr. DiAnne Borders, faculty member in the Department of Counseling and Educational Development at The University of North Carolina at Greensboro at 336-334-3425 or Melissa Wheeler, doctoral student in the Department of Counseling and Educational Development at The University of North Carolina at Greensboro at mawheele@uncg.edu. You should ask any questions you have before making up your mind. Do you have any questions about this study?

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Compliance at UNCG toll-free at (855)-251-2351. If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you through your CED 210 instructor.

Please keep the document I provided you in a safe place so you can access this information if needed. As a way to protect your privacy, please do not write your name on this document.

By participating in this study, you agree that you have been informed of the nature, risks, and benefits of this study, you fully understand the nature of the study and risks involved, all of your questions concerning this study have been answered and you are openly willing consent to take part in this study. You also acknowledge that you are over the age of 18 and able to consent to participation in this study.

CONSENT TO ACT AS A HUMAN PARTICIPANT: Long Form

Project Title: Pilot Study: First-Generation College Students' Career Decision Self-Efficacy, Vocational Outcome Expectations, and Commitment to Career Choices

Project Director: Dr. DiAnne Borders and Melissa Wheeler

What is the study about? This is a research project examining the thoughts individuals have about their ability to make decisions regarding career choices, their expectations around what will happen when they make a choice, how committed they are to the choice, and how open they are to the career search process. This study will also look at how effective you perceive some of your class career activities and interventions to be.

Why are you asking me? You are a first or second year undergraduate student attending UNCG who is taken CED 210.

What will you ask me to do if I agree to be in the study? As a participant, you will be asked a series of questions that will help the researcher understand your background and perceptions. Additionally, you will be given the Career Decision Self-Efficacy scale to assess how confident you feel you can make a career decision, the Vocational Outcome Expectations Scale to measure your expectations if you choose a particular career, and the Commitment to Career Choices scale to assess your level of commitment to your chosen career and your openness to the exploration process. This will take approximately 20 minutes of your time. You will be given a packet containing all of the forms and scales mentioned and asked to complete this in class. This is voluntary and is not a requirement of being part of this class. Your instructor will not be given access to your answers.

Is there any audio/video recording? No.

What are the dangers to me? The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.

You will not be subject to any physical danger by taking part in this study. However, some of the scales may ask questions that could create some stress or anxiety. The risks for participation are minimal. If you experience uncomfortable emotional reactions please feel free to contact the Counseling and Testing Center at 336-334-5340. Due to the career related nature of these assessments, you can also call the Career Services Center at 336-334-5454 with concerns related to content presented in the assessment packet.

If you have questions, want more information or have suggestions, please feel free to ask now or you can contact Dr. DiAnne Borders at 336-334-3425 or Melissa Wheeler at mawheele@uncg.edu.

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Compliance at UNCG toll-free at (855)-251-2351. Please keep this document in a safe place so you can access this information if needed.

Are there any benefits to me for taking part in this research study?

There are no direct benefits to you for participating. However, the study may enable us to understand the career beliefs of first and second year students.

Are there any benefits to society as a result of me taking part in this research? The study may enable us to learn more about what students find helpful about the CED 210 course as well as what might not be as helpful when taking this course. We may also be able to learn more about the career beliefs and commitment of first and second year students which may help in the development of better courses and interventions to address these thoughts in the college setting.

Will I get paid for being in the study? Will it cost me anything? There are no costs to you or payments made for participating in this study.

How will you keep my information confidential? All hard copy research materials will be kept in a locked file cabinet when not in active use. All digital data will be password protected and kept on the student investigator's computer. No identifiable information will be collected as part of this study so the risk of confidentiality being breached is minimal; you should not put your name on any of the materials. All information obtained in this study is strictly confidential unless disclosure is required by law.

What if I want to leave the study? You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

What about new information/changes in the study? If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you through your CED 210 instructor.

Voluntary Consent by Participant: By participating in this study, you agree that you have been informed of the nature, risks, and benefits of this study, you fully understand the nature of the study and risks involved and are openly willing consent to take part in

this study. All of your questions concerning this study have been answered. You are also agreeing that you are 18 years of age or older and are able to give consent to participate in this study. Please keep of copy of this form for your records.

Demographics

Directions: Please check or write the answer that applies to you.

1. Gender: Male Female
2. Age: _____
3. Ethnicity:
Caucasian/White: African American/Black Hispanic/Latino
Native American Asian American/Asian Multiracial
Other
4. Class Rank: First-year Second-year Other _____
5. Highest Education Level Completed by Mother:
High School Some College Community or Technical College
College Graduate/Professional School
6. Highest Education Level Completed by Father:
High School Some College Community or Technical College
College Graduate/Professional School
7. Do you live: On-Campus Off-Campus
8. Are you undecided or rethinking your major? Yes No
9. If yes, how many majors are you considering? _____
10. Which careers are you interested in? _____

11. Have you participated in or are you participating in career counseling while in college?
Yes No
12. What 3 topics/activities in CED 210 did you find most helpful in choosing or planning for your major or career?:

13. What 3 topics/activities in CED 210 did you find least helpful or not as helpful in choosing or planning for your major or career:

APPENDIX H

RECRUITMENT EMAIL FOR PREVIOUSLY INTERESTED STUDENTS

Dear _____,

I hope you are well! I am emailing you to ask if you would be willing to participate in a research study I am conducting. I am interviewing students whose parents did not graduate from college and just finished their first-year of college but were undecided majors at some point during their first year. I really enjoyed having you in class and I remember your stories about your first year.

I would like to interview you in person as part of my research study so that I can learn more about your experiences. The interview will take approximately 2 hours and you will be given a \$20 gift card at the end of the interview. Questions asked will explore your expectations, learning experiences, and influences during the time you were undecided. The interview will be audio recorded and transcribed.

The results from this study could help college professionals understand the experiences of students who are undecided during their first year of college. All audio recordings and typed transcripts will be password protected and kept on the student investigator's computer. No identifiable information will be collected as part of this study and your name will be redacted from the typed transcripts so the risk of confidentiality being breached is minimal; you should not put your name on any of the materials. You will be asked to create a unique identification number during the interview that will be used in connection with your email address to send the typed transcripts for your review. Once the transcripts have been sent for your review, your email address will be deleted from all records.

Please note that your participation in this study is voluntary. You will not be penalized in any way for not participating. The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants. If you have questions, want more information or have suggestions, please feel free to ask now or you can contact Dr. DiAnne Borders at 336-334-3425 or Melissa Wheeler at mawheele@uncg.edu or 252-412-5902 (be sure to leave your phone number). If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Compliance at UNCG toll-free at (855)-251-2351.

If you agree to participate in the study, please send me an email letting me know when you are available to interview. Interviews can be conducted on campus or at a secure location of your choosing.

Thank you for your time,

Melissa Wheeler

APPENDIX I

EMAILED INFORMED CONSENT

CONSENT TO ACT AS A HUMAN PARTICIPANT: Long Form

Project Title: A Major Decision: An Exploratory Study of the Experiences of Being Undecided as a First-Year, First-Generation College Student on a Four-Year College Campus

Project Director: Dr. DiAnne Borders and Melissa Wheeler

What is the study about? This is a research project examining the experience of being undecided as a first-year, first-generation college students at a four-year college. The study will explore expectations, learning experiences, and influences during the time students were undecided.

Why are you asking me? You are a first-generation college student who just completed your first year of college and is or was undecided on, exploring, or re-thinking your college major during your first-year of college. You must be 18 years or older to participate in this study.

What will you ask me to do if I agree to be in the study? You will be asked questions concerning your experiences being a first-generation college student who is undecided or re-thinking your major in your first year of college. You will be asked to commit approximately 90 minutes of your time, which includes reviewing the informed consent, answering questions of the interview, and reviewing the typed transcripts for accuracy. If you agree to participate in this study, the student researcher will email you to schedule the interview either in person. After completing the interview, the student researcher will email or mail you a copy of a written transcript of your answers for you to review for accuracy. You will be asked your preference for receiving the written transcript. If you have any questions you can contact the student researcher at mawheele@uncg.edu.

Is there any audio/video recording? Yes, the interview will be audio-recorded. Audio recordings will be treated as confidential information solely and used to transcribe the interviews into a typed format. All identifying information will be removed from the typed transcript and your name will be replaced with a pseudonym. The research team will then use the typed transcript as data in the analysis process.

What are the dangers to me?

The Institutional Review Board at the University of North Carolina at Greensboro has determined that participation in this study poses minimal risk to participants.

You will not be subject to any physical danger by taking part in this study. However, some of the questions may focus on issues that could create some stress or anxiety. The risks for participation are minimal. If you experience uncomfortable emotional reactions please feel free to contact the Counseling and Testing Center at 336-334-5340.

If you have questions, want more information or have suggestions, please feel free to ask now or you can contact Dr. DiAnne Borders at 336-334-3425 or Melissa Wheeler at mawheele@uncg.edu.

APPROVED IRB

JUN 03 2013

If you have any concerns about your rights, how you are being treated, concerns or complaints about this project or benefits or risks associated with being in this study please contact the Office of Research Compliance at UNCG toll-free at (855)-251-2351. Please keep this document in a safe place so you can access this information if needed.

Are there any benefits to me for taking part in this research study?

There are no direct benefits to you by participating in this study. Talking through your experience may help bring awareness to your decision making process and your experiences as a first-generation college student on a four-year college campus.

Are there any benefits to society as a result of me taking part in this research? The study may enable us to learn more about what may help first-generation college students through the major choice process. This information could help colleges and universities design programs to help first year, first-generation college students choose majors and potentially stay in school.

Will I get paid for being in the study? Will it cost me anything? There are no costs to you for participating in this study. You will receive a \$20 gift card upon completion of the interview.

How will you keep my information confidential? All information obtained in this study is strictly confidential unless disclosure is required by law. All audio recordings and typed transcripts will be password protected and kept on the student investigator's computer. No identifiable information will be collected as part of this study and your name will be redacted from the typed transcripts so the risk of confidentiality being breached is minimal; you should not put your name on any of the materials. You will be asked to create a unique identification number on the online that will be used in connection with your email address to send the typed transcripts for your review. Once the transcripts have been sent for your review, your email address will be deleted from all records.

What if I want to leave the study? You have the right to refuse to participate or to withdraw at any time, without penalty. If you do withdraw, it will not affect you in any way. If you choose to withdraw, you may request that any of your data which has been collected be destroyed unless it is in a de-identifiable state.

What about new information/changes in the study? If significant new information relating to the study becomes available which may relate to your willingness to continue to participate, this information will be provided to you through the researcher.

Voluntary Consent by Participant: By participating in this study, you agree that you have been informed of the nature, risks, and benefits of this study, you fully understand the nature of the study and risks involved and are openly willing consent to take part in this study. All of your questions concerning this study have been answered. You are also agreeing that you are 18 years of age or older and are able to give consent to participate in this study. Please keep of copy of this form for your records.

APPROVED IRB

JUN 03 2013

APPENDIX J

COPY OF INTERVIEW QUESTIONS SENT TO PARTICIPANTS

Interview Questions for “A Major Decision”

1. Tell me a little about your hometown. Where did you grow up?
2. Tell me a little bit about your family.
3. What has college been like so far?
4. Describe how you chose to come to college?
5. Describe how you chose what to major in?
6. Who influenced you in these decisions? How did each person (name the people) influence you?
7. Did anyone not show confidence in you during these times Describe how you came to be undecided about a major.
8. What’s difficult about being an undecided student? What kinds of things do you think about when considering a major?
Take CCCS
9. What things came to mind while you were taking this scale?
10. Did any of the items stand out for you? If so, which ones? What made these stand out for you?
11. Are there things you expect from a major listed as items in the scale?
12. Let’s talk about the questions you marked always true or never true. Where do you think those ideas came from?
13. What would you say to a first-generation college student entering college for the first time about choosing a major?
14. Why did you choose to participate in this project?

APPENDIX K

CQR DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Identification Number (last 4 digits of your phone number): _____

Email address: _____

1. Gender: Male Female Other: _____

2. Age: _____

3. Ethnicity:

Caucasian/White African American/Black Hispanic/Latino

Native American Asian American/Asian Multiracial

Other

4. How would you describe your sexual affectional status?

Heterosexual or straight Gay or Lesbian Bisexual

Other: _____

5. Relationship Status: Single Married Committed Relationship

Other: _____

6. Class Rank: First-year Second-year Third Year

Fourth Year Other _____

7. When did you complete your first year of college at UNCG? _____

8. Highest Education Level Completed by Mother:

Did Not Complete High School High School Some College

Community or Technical College College

Graduate/Professional School

9. Highest Education Level Completed by Father:

Did Not Complete High School High School Some College

Community or Technical College

College Graduate/Professional School

10. Do you live: On-Campus Off-Campus

11. If on campus, are you participating in a learning community? Yes No

If yes, which one? _____

12. Are you receiving financial aid? Yes No

If yes, are you receiving (check all that apply) Grants Loans
Scholarships Work Study

13. Family Income (approximately): Less than \$10,000 \$10,000-19,999

\$20,000-29,999 \$30,000-39,999 \$40,000-49,999

\$50,000-59,999 \$60,000-69,999 \$70,000-79,999

\$80,000-89,999 \$90,000-99,999 above \$100,000

14. Are you currently undecided or rethinking your major? Yes No

If yes, how many majors are you considering? _____

If no, were you undecided or rethinking your major at some point during your first year of college? Yes No

If yes, how long were you undecided or rethinking your major?

15. Which careers are you interested in? _____

16. Have you participated in or are you participating in career counseling while in college? Yes No

If so, please describe the topics and activities covered in career counseling:

Have you taken or are you enrolled in CED 210? Yes No

17. What are your biggest concerns and struggles since entering college?

APPENDIX L

INTERVIEW PROTOCOL WITH FOLLOW-UP QUESTIONS PRIOR TO PILOT STUDY

Interview Protocol:

Rapport building questions:

1. Tell me a little about your hometown. Where did you grow up?
2. Tell me a little bit about your family.
3. What has college been like so far?

Main Topic Questions:

4. Describe how you chose to come to college?
5. Describe how you chose what to major in?
6. Who influenced you in these decisions? How did each person (name the people) influence you? (Possible follow-up questions: Sometimes people mention (fill in with what not mentioned: counselors, teachers, family, and friends),
7. Did anyone not show confidence in you during these times (Possible follow-up: If yes, tell me more about that experience, if you will. How did you know they did not have confidence in you? How did it make you feel?)
8. Describe how you came to be undecided about a major.
9. What's difficult about being an undecided student? (Possible follow-up: Does being undecided about your major come up in any conversations with parents, family, or friends? If so, tell me about those conversations.)
10. What kinds of things do you think about when considering a major?

Take the Commitment to Career Choices Scale.

11. What things came to mind while you were taking this scale?
12. Did any of the items stand out for you? If so, which ones? What made these stand out for you?
13. Are there things you expect from a major listed as items in the scale?
14. Let's talk about the questions you marked always true or never true. Where do you think those ideas came from?

Reflect on Broader Issues:

15. What would you say to a first-generation college student entering college for the first time about choosing a major?
16. Why did you choose to participate in this project?

APPENDIX M

CQR RESEARCH TEAM TRAINING AGENDA

CQR Training Day 1 Overview

Missy Wheeler

Definitions:

Domains: Big picture topics

Core ideas: Summaries of what participants said within each domain

Cross Analysis: Themes across cases

Big Picture of Our Work

1. Bracket, Define Domains, Practice coding on excerpts of first transcript (send definitions to auditor) Day One
2. Code transcript and meet to reach consensus on coded domains
3. Code other transcripts and meet for consensus
4. Establish core ideas- meet to train together- meet to discuss consensus on core ideas
5. Send to auditor- if domains or core ideas change, re-evaluate transcripts
6. Cross Analysis- meet to train- meet to discuss consensus (TBD)
7. Send to Auditor

Process:

1. Bracket
 - A. Set ground rules for bracketing discussions

- B. Record biases- personal views that might make objectivity difficult
- C. Discuss and record expectations: prior beliefs formed by past experiences and literature review.

2. Domains

- A. Define domains
- B. Assign domain numbers
- C. Code data into domains (see spreadsheet similar to figure 8.1)
- D. Can double code lines
- E. Establish consensus version of data (to be kept by Missy)
- F. Consistent consensus- can switch to rotating team

3. Core Ideas

- A. Take quotes from domains and summarize
- B. Read together and reach consensus on each data chunk
- C. Avoid interpretation!
- D. Can listen to tape if needed
- E. Can add parts of Interviewer statements and questions to help
- F. For double coded domains, only summarize part relevant for domain

4. Send to Auditor

5. Cross-Analysis

(To come later)

APPENDIX N

RESEARCH TEAM BRACKETING

Bracketing meeting 7/3/13

Research team member 1 (MF)- First-generation college student who was undecided for 3 years. Hard to be objective. As bracketing convo happened, comparing to own experiences to see what fits and what doesn't. In moment, didn't see what an experience college was. Has a lot of empathy. Will have trouble not interpreting into what they are going say. Grew up in North Texas started off at 4 year, stayed close to home, worked during college. College and going away to college was scary to parents. A lot of ambivalence around what's right and the right way to do it. Might know choosing based on perception between occupation but might be torn between what their peers are doing and feeling isolated and unsure about the way they are making decisions. Strong bias toward being undecided. Gut reaction tends to normalize that and she tends to encourage being undecided. Felt pressure to decide her major from university and peers but not from family. In trio program in high school really helped her. Trio counselor who came to school once a week or once every 2 weeks and talked about classes, how to register, but that was huge and she doesn't know where she would be.

Research team member 2 (BG)- Developmental thinker. Students are too young to decide what to do with rest of life. Thinks undecided people would be younger. Thinking of CED 210 students who were older 24-25 had experienced real world and jobs and had experiences that helped them make decisions. People undecided would be younger or less mature. Expects a certain level of independence. Choosing to go against the grain means be a certain kind of thinker and can make decisions for self. Expects certain level of pride, may not have the same role models as others, but may have pride in doing this on their own. In terms of directions, thinking STEM and Education and less towards Humanities and Social Sciences due to career ideas. Thinking what am I going to do with a Bachelors in Art or Anth. Does not know college counseling lit, but expects people to not be considering graduate school now. Not an option or possibility. Experience was opposite of Melissa. Dad has phd and mom 2 bachelors. Trade school not an option in her family. Does not feel the same personal connection. A lot of her friends' parents were college educated. In college, not sure if there were a lot of FGCS...as gotten older, has more but not when younger. Distinct memories of going to school with dad and going to college office and being the kid in the back sitting in the

class. Dad teaches sociology. College was going and hanging out with professors and chit-chatting and them bringing kids to school.

Primary researcher (research team member 3, MW)- Big picture thinker. Grew up in rural, eastern North Carolina. Not many classmates went to college. Both of her parents graduated from college and her mother has her Masters degree. Mother attained her Masters degree in Education while working full-time as a Kindergarten teacher. Researcher has previously worked in higher education at two public universities. Worked with freshmen and sophomore students as first job in counseling. Had to counsel many students out of medical professions due to low performance in courses. She found many students had not considered other careers. Felt FGCS she saw were very career focused in college. Many did not know what to do if required to change majors and did not know how majors led to careers. She thought participants would be very career focused and feel lost or confused during the undecided process. She also expected students to experience guilt during the undecided process due to other research study results on the experiences of FGCS. Expected students to think college would lead to a certain job, certain financial stability, etc. Thought students may report not being supported by parents to stay in school once their majors changed.

APPENDIX O

FINAL INTERVIEW PROTOCOL

Interview Protocol:

Rapport building questions:

1. Tell me a little about your hometown. Where did you grow up?

2. Tell me a little bit about your family.

3. What has college been like so far?

Main Topic Questions:

4. Describe how you chose to come to college?

5. Describe how you chose what to major in?

6. Who influenced you in these decisions? How did each person (name the people) influence you? (Possible follow-up questions: Sometimes people mention (fill in with what not mentioned: counselors, teachers, family, and friends)

7. Did anyone not show confidence in you during these times (Possible follow-up: If yes, tell me more about that experience, if you will. How did you know they did not have confidence in you? How did it make you feel?)

8. Describe how you came to be undecided about a major.

9. What's difficult about being an undecided student? (Possible follow-up: Does being undecided about your major come up in any conversations with parents, family, or friends? If so, tell me about those conversations.)

10. What kinds of things do you think about when considering a major?

Take the Commitment to Career Choices Scale. “This scale may get you to start thinking about some of your ideas around careers. Please follow the directions and we will talk about your answers afterward.

11. What things came to mind while you were taking this scale?

12. Did any of the items stand out for you? If so, which ones? What made these stand out for you?

13. Are there things you expect from a major listed as items in the scale?

14. Let's talk about the questions you marked always true or never true. Where do you think those ideas came from?

Reflect on Broader Issues:

15. What would you say to a first-generation college student entering college for the first time about choosing a major?

16. Why did you choose to participate in this project?
