First-generation college students face many challenges and many successes as the first from their family to go to college. Although much research has been done to support this population of students in the transition and adjustment to the college culture, little research has been completed about the experiences they face upon their return home to their family culture. Due to the lack of shared experiences, first-generation college students may encounter an increase in psychological issues when re-assimilating to their family culture after engaging in the college culture. Because research has indicated that secure attachment bonds lessen the impact of psychological symptoms such as stress, anxiety, and isolation during the transition and adjustment period to college, it may be possible that strong attachment decreases these same psychological issues during the transition and adjustment back home. This study examined the differences of the re-entry experiences of first-year college students based on generation status to their family culture using a theoretical lens that investigated theories of re-entry shock and parental attachment. The presence of secure attachment bonds from family relationships and the impact of these bonds as they relate to transition and adjustment home were also explored. The research design considered the characteristics of gender and ethnicity and the role they played on the dependent variables of re-entry shock and parental attachment.

Although the results of the study did not find statistically significant differences between groups regarding re-entry shock, significant differences were found in regard to parental attachment bonds based on gender and generation status. Understanding
differences in parental bonds will assist student affairs practitioners in offering ongoing programs and services that not only assist students in their transition back to their family culture, but may also make parents and families more aware of the opportunities and challenges that their students face throughout the college journey.
FIRST-YEAR READJUSTMENT TO FAMILY CULTURE: THE ROLES OF GENERATION STATUS AND PARENTAL ATTACHMENT ON RE-ENTRY SHOCK

by

Mary E. Anderson

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 2016

Approved by

Deborah J. Taub
Committee Chair
To my parents

Dot and Bob Anderson
This dissertation, written by Mary E. Anderson, has been approved by the following committee of the Faculty of The Graduate School at The University of North Carolina at Greensboro.

Committee Chair  Deborah J. Taub
Committee Members  Terry A. Ackerman
                  David F. Ayers
                  Vicki McNeil

June 9, 2016
Date of Acceptance by Committee

June 9, 2016
Date of Final Oral Examination
ACKNOWLEDGMENTS

I would like to thank my committee for your support and guidance throughout this process: Dr. Taub for being my sounding board and advocate from the moment I began this process and sticking by me until the very end; Dr. Ackerman for allowing me to visit your office any time for your feedback; Dr. Ayers for always showing an interest in my research and encouraging me to look at it from different perspectives; and Dr. Vicki McNeil for your excitement about participating in this process even after moving states away.

I would also like to thank my colleagues and mentors in the profession: Dr. Brett Carter for always encouraging me to progress forward. You have always invested in me as a professional and as a friend and have been by my side every step of the way. Thank you Dr. Jen Day Shaw for being with me throughout my entire career in student affairs. The first day I stepped onto the UNCG campus, you told me “the sooner you get it started, the sooner you will get it done.” Thank you for always supporting me in my educational and professional endeavors.

Thank you to my fellow classmates, Dr. Liz Jodoin, Dr. Susan Davies, Dr. Wendy Powers, Dr. Allison Palmadessa, and soon-to-be Dr. Chris Gregory. You all pushed me and kept me going even when I wanted to give up.

Thank you to all of my friends and family who have supported me and stood by me. You were understanding when I had to skip holidays, vacations, and other fun events so I could stay home and write.
Lastly, and most importantly, thank you to my mom and dad in heaven. You supported me emotionally and financially at the beginning of my journey, and although you are no longer here physically, I know you have been with me along the way and are proud to see me finish this accomplishment from above.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES</th>
<th>viii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF FIGURES</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER

### I. INTRODUCTION

- Problem Statement ................................................................. 2
- Theoretical Framework ................................................................ 6
  - Re-entry Shock ........................................................................ 6
  - Attachment Theory .................................................................. 8
- Purpose of the Study ............................................................... 10
- Research Questions .................................................................... 10
- Significance of the Study ......................................................... 12
- Definition of Terms ................................................................. 13

### II. REVIEW OF THE LITERATURE

- Generation Status: First-generation Versus Non-first-generation .... 15
  - College Preparation and Choice ........................................... 16
  - College Transition and Adjustment ........................................ 17
  - Social Adjustment, Academic Adjustment, and Persistence ...... 18
  - Demographic Differences ...................................................... 22
- Culture ..................................................................................... 23
- Theory of Culture Shock .......................................................... 25
- Theory of Reverse Culture Shock ............................................. 27
- Parental Attachment ................................................................. 30
  - Attachment Theory ............................................................... 31
  - Attachment and College Adjustment ..................................... 35
  - Attachment and Separation ................................................. 36
  - Attachment and Psychological Well-being ............................ 37
- Conclusion .............................................................................. 39

### III. RESEARCH METHODOLOGY

- Research Questions and Hypotheses ....................................... 42
- Research Design ....................................................................... 47
Data Collection ........................................................................................................48
Participants .............................................................................................................50
Instrumentation .......................................................................................................52
    Reentry Shock Scale (Seiter & Waddell, 1989) ..................................................52
    Pilot study ............................................................................................................53
    Current study .......................................................................................................54
    Parental Attachment Questionnaire (Kenny, 1987) ...........................................54
Data Analysis ...........................................................................................................56

IV. RESULTS ...........................................................................................................65
    Descriptive Statistics ..........................................................................................65
    Research Questions ............................................................................................66

V. DISCUSSION .......................................................................................................93
    Introduction .........................................................................................................93
    Findings ...............................................................................................................95
        Re-entry Shock ...............................................................................................95
        Parental Attachment .......................................................................................97
        Parental Attachment as a Mediator for Re-entry Shock ..............................100
    Limitations .........................................................................................................100
    Significance of the Study ....................................................................................102
    Implications for Practice ......................................................................................103
    Implications for Future Research ......................................................................105
    Conclusion ..........................................................................................................106

REFERENCES ........................................................................................................109

APPENDIX A. DISSERTATION INSTRUMENT ..........................................................122
APPENDIX B. INVITATION TO PARTICIPATE .....................................................131
APPENDIX C. INFORMED CONSENT .................................................................132
APPENDIX D. SURVEY REMINDER EMAIL .........................................................134
APPENDIX E. FINAL SURVEY REMINDER EMAIL .............................................135
APPENDIX F. PERMISSION TO USE RSS ............................................................136
APPENDIX G. PERMISSION TO USE PAQ ..........................................................137
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Generation Status by Frequency and Percentage</td>
<td>50</td>
</tr>
<tr>
<td>Table 2</td>
<td>Gender by Frequency and Percentage</td>
<td>51</td>
</tr>
<tr>
<td>Table 3</td>
<td>Ethnicity by Frequency and Percentage</td>
<td>51</td>
</tr>
<tr>
<td>Table 4</td>
<td>Research Design Matrix</td>
<td>56</td>
</tr>
<tr>
<td>Table 5</td>
<td>Means, Standard Deviations, and Sample Sizes for Generation Status, Gender, and Ethnicity in Regard to Re-entry Shock</td>
<td>66</td>
</tr>
<tr>
<td>Table 6</td>
<td>Means, Standard Deviations, and Alpha Coefficients for Scales and Subscales</td>
<td>66</td>
</tr>
<tr>
<td>Table 7</td>
<td>Means, Standard Deviations, and Sample Sizes for Generation Status and Re-entry Shock</td>
<td>67</td>
</tr>
<tr>
<td>Table 8</td>
<td>One-Way Analysis of Variance for Generation Status in Regard to Re-entry Shock</td>
<td>68</td>
</tr>
<tr>
<td>Table 9</td>
<td>Means, Standard Deviations, and Sample Sizes for Generation Status, Gender, and Re-entry Shock</td>
<td>69</td>
</tr>
<tr>
<td>Table 10</td>
<td>Two-Way Analysis of Variance between the Effects of Generation Status and Gender on Re-entry Shock</td>
<td>69</td>
</tr>
<tr>
<td>Table 11</td>
<td>Two-Way Analysis of Variance between the Effects of Generation Status and Ethnicity on Re-entry Shock</td>
<td>70</td>
</tr>
<tr>
<td>Table 12</td>
<td>Means, Standard Deviations, and Sample Sizes for Generation Status, Ethnicity, and Re-entry Shock</td>
<td>71</td>
</tr>
<tr>
<td>Table 13</td>
<td>Pearson Correlations between Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as a Source of Support</td>
<td>73</td>
</tr>
<tr>
<td>Table 14</td>
<td>Multivariate Tests for the Effect of Generation Status on the PAQ Subscales</td>
<td>74</td>
</tr>
</tbody>
</table>
Table 15. One-Way Multivariate Analysis of Variance between the Effects of Generation Status on the PAQ Subscales .......................................................... 74

Table 16. Means, Standard Deviations, and Sample Sizes for Generation Status and PAQ Subscales .................................................................................................. 75

Table 17. Multivariate Tests for the Effect of Generation Status and Gender on the PAQ Subscales .................................................................................................. 76

Table 18. Two-Way Multivariate Analysis of Variance between the Effect of Generation Status and Gender on the PAQ Subscales ............................................. 77

Table 19. Means, Standard Deviations and Sample Sizes for the PAQ Subscales, Generation Status, and Gender ............................................................................. 78

Table 20. Multivariate Tests for the Effect of Generation Status and Ethnicity on the PAQ Subscales .......................................................................................... 80

Table 21. Two-Way Multivariate Analysis of Variance between the Effect of Generation Status and Ethnicity on the PAQ Subscales ............................................. 80

Table 22. Means, Standard Deviations, and Sample Sizes for Generation Status and Ethnicity ........................................................................................................ 81

Table 23. Regression Model Summary for Predictors of Re-entry Shock ................................................................................................................................. 83

Table 24. Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Re-entry Shock .................................................................................... 83

Table 25. Regression Model Summary for Predictors of Affective Quality of Relationships ............................................................................................................ 85

Table 26. Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Affective Quality of Relationships .................................................................. 85

Table 27. Regression Model Summary for Predictors of Parents as a Source of Support ................................................................................................................... 86

Table 28. Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Parents as a Source of Support .................................................................. 87

Table 29. Regression Model Summary ..................................................................................................................................................... 88
Table 30. Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Parents as Facilitators of Independence ................................. 88
LIST OF FIGURES

Page

Figure 1. Gullahorn and Gullahorn W-curve Hypothesis .................................................. 8

Figure 2. Mediating Relationship .................................................................................... 64

Figure 3. Mediating Relationship for Affective Quality of Relationships on Re-entry .......................................................... 89

Figure 4. Mediating Relationship for Parents as a Source of Support on Re-entry Shock ................................................................ 91

Figure 5. Mediating Relationship for Parents as Facilitators of Independence on Re-entry Shock ................................................................ 92
CHAPTER I
INTRODUCTION

The transition to college is a monumental experience for first-year students due to the many “firsts” that come with the experience. This may be the first time that a student needs to cook a meal, do the laundry, share a room with a roommate, use an alarm to wake up, create a schedule in order to accomplish responsibilities, navigate a complex system, and function without family nearby. However, for students who are the first in their family to attend college, the transition may be even more challenging and frightening since nobody in the family can relate to the new journey.

Stepping onto a college campus for first-generation college students is stepping not only into a whole new experience, but may sometimes feel as if they are stepping into a whole new world. Like many first-year students, a priority when arriving to college is to make friends and fit in; however, some first-generation college students may feel like outsiders due to language differences, socioeconomic statuses, academic preparedness, and cultural variances (Cushman, 2007). In addition to the desire to fit in, this group of students also worries about their academic success and making their families proud (Zwerling & London, 1992). As the first in their family to have the opportunity to attend college, many struggle with the stresses of not wanting to let their families down (Torres, 2004; Zwerling & London, 1992). Some of these students are stepping out of their working class culture and progressing toward the middle class or even an elite culture.
once they graduate (London, 1992). This experience can be intimidating and a balancing act for a student working to integrate into an unfamiliar place.

Like all students, first-generation college students bring with them to campus unique beliefs, values, practices, morals, customs, and traditions. They have played various roles throughout their lives such as sister, brother, daughter, son, student, caretaker, babysitter, or athlete and have formed these identities over a lifetime of experiences. First-generation college students come to campus with a self-image that contributes to their personal self-definition. These characteristics have been shaped by teachers, friends, church leaders, coaches, and neighbors. However, most often, many of these attributes are shaped by those who have spent the most time with these students throughout their lives — their families. Therefore, it is important to recognize the role that family culture plays in the development and aspirations of a first-generation college student.

**Problem Statement**

An abundance of research on first-generation college students currently exists. Areas that have been studied thoroughly include common characteristics of first-generation college students (Green, 2006); the barriers that first-generation college students experience in their transition to college (Bui, 2002; Choy, 2001; Green, 2006; Hahs-Vaughn, 2004); how these students adjust to the academic demands of college (Byrd & MacDonald, 2005; Inkelas, Daver, Vogt, & Leonard, 2006; Murphy & Hicks, 2006; Pascarella, Wolniak, Pierson, & Terenzini, 2003); the social transitions that this population undergoes upon entering college (Alessandria & Nelson, 2005; Bui, 2002;
Inkelas et al., 2006); and necessary support services that ease the transition for these students (Grant-Vallone, Reid, Umali, & Pohlert, 2004; Owens, Lacey, Rawls, & Holbert-Quince, 2010).

Terenzini, Springer, Yaeger, Pascarella, and Nora (1996) found that first-generation college students vary greatly from non-first-generation students. Many are coming to school less prepared in the areas of math, reading, and critical thinking abilities and also report more instances of racial discrimination than their traditional peers. Research has shown that additional differences include that they are more likely to come from families with lower socioeconomic levels (Bui, 2002; Inman & Mayes, 1999; Terenzini et al., 1996), less likely to aspire to have higher degrees of learning (Bui, 2002; Hahs-Vaughn, 2004; Pascarella, Pierson, Wolniak, & Terenzini, 2004), and make fewer connections with faculty and peers in high school (Terenzini et al., 1996) than non-first-generation students. In addition, due to their parents’ lack of higher education knowledge, first-generation students are less likely to have acquired the academic cultural capital that other students previously exposed to higher education may possess (Pascarella et al., 2004). For first-generation college students, especially those from underrepresented groups, the decision to attend college and the process of choosing a college are typically decisions made considering a variety of factors including individual and collective motivations. Individual motivations consist of aspects such as personal interest and career choice, while collectivist aspects may include expectations from family members (Dennis, Phinney, & Chuateco, 2005).
Much emphasis has been placed on the first-generation college student’s transition from their family culture to the college culture. Recommendations for increased support in the forms of academic advising, personal counseling, access to technology, priority registration, faculty and peer mentoring, tutoring, and supplemental instruction have been made as a result of studying this student population (Grant-Vallone et al., 2004). Through these types of programs and services, higher education professionals have focused on making the transition smooth for this special population of students entering institutions of higher learning.

In addition to providing support resources to aid in adjustment, researchers have looked at how parental attachment adds to the first-year student’s college transitions. Heister, Nordstrom, and Swenson (2009) found that students who felt more attached to their parents had more positive adjustments to the college culture and fewer psychological symptoms in the adjustment phase; however, no significant difference existed between men and women. Their research also indicated that over time, the female students became more attached to their parents while male attachment decreased (Heister et al., 2009). Kenny and Donaldson (1991) also found that attachment to parents made a difference to the ease of transition for college; however, this difference was only found for female students. Similar to Heister et al. (2009) but contrary to Kenny and Donaldson’s (1991) research, Mattanah, Brand, and Hancock (2004) found no difference between male and female adjustment to college. Whatever the findings, justification for support services and programs for first-generation college students have been developed
and implemented on college campuses all over the country based on studies of transition and adjustment in hopes of making for smoother transitions for these students.

Following the successful transition to their new environment and learning the cultural norms of the college environment, first-generation college students are faced with the return back to their family culture. Although a different population of students, research has shown that students returning to their home culture following an extended period studying abroad may face social and psychological challenges when reentering their once familiar environment. This phenomenon, known as reverse culture shock or re-entry shock, often results in feelings of anxiety, isolation, anxiety, alienation, and disconnectedness (Adler, 1981; Gaw, 2000; Nash, 1976; Rogers & Ward, 1993). Because research indicates that the transition to home culture for students studying abroad may result in these types of social and psychological challenges, there is a possibility that first-generation college students, returning to their family culture after acclimating to the college culture and being away at school for an extended period of time, may face similar challenges.

Huff (2001) seems to be one of the few, or the only, to study the relationship between parental attachments and reverse culture shock on a college population. This study was conducted with missionary kids returning to the United States after living in a second culture. No studies were found that assess the first-year college student’s transition back to their family culture and what role parental attachment may play on that transition. Due to this apparent gap in today’s literature and the unique position of first-generation college students’ relationships with their families, the purpose of this study is
to explore the readjustment of first-year, first-generation college students back to their family culture after being away at college and whether or not attachment to parents makes a difference in the transition back to their family. Specifically, the researcher will determine if there are significant differences with first-year, first-generation college students’ experiences to first-year, non-first-generation college students’ experiences in the areas of re-entry shock while looking at what role, if any, that gender, ethnicity, and parental attachment contribute to this transition.

**Theoretical Framework**

**Re-entry Shock**

Culture shock is typically referred to as phenomenon that one may experience when adjusting to a new or foreign culture. Lysgaard (1955) found that a person adjusting to a new environment begins with a sense of euphoria over the excitement of moving to a new place. After a while, the person longs to make more meaningful connections with those in the new host culture (Lysgaard, 1955; Oberg, 1960). During this time, the sojourner may experience psychological difficulties such as feelings of isolation, alienation, anxiety, irritability, helplessness, or disregard among other psychological effects (Adler, 1975; Oberg, 1960). After further assimilation and the development of social memberships, the sojourner will begin to feel more comfortable and accepted (Oberg, 1960).

In some circumstances, returning to one’s primary culture after assimilating to a foreign culture many times has the same impact as culture shock. Upon the return home, travelers may be met with resistance from family and friends due to their new behaviors,
values, and beliefs (Gaw, 2000; Gullahorn & Gullahorn, 1963). This transition actually has caused a more difficult transition than that of the initial culture shock because the reactions by those at home upon the return were never expected by the returner (Gullahorn & Gullahorn, 1963). This time, the expectations that things will be the same as when the person left results in a more intense crisis (Adler, 1981), especially for younger people (Gullahorn & Gullahorn, 1963) when they realize that life at home has changed. In addition, Searle and Ward (1990) found that the greater the cultural distance of the traveler, the greater the adjustment problems upon the return home. An expansion of culture shock, this phenomenon is known as reverse culture shock, also commonly referred to as re-entry shock.

Numerous researchers have studied college students and their return experiences after studying abroad (Adler, 1981; Gaw, 2000; Gullahorn & Gullahorn, 1963; Martin, 1986; Nash, 1976; Rogers & Ward, 1993; Sussman, 2001). Many outcomes of these studies have resulted in significant findings about college students. For instance, Sussman (2001) found that students who take on greater identities of their host cultures have a more difficult time readjusting to their home culture. She also found that those who were the least prepared for the re-entry to their home culture suffered the most distress and had a more difficult time readjusting (Sussman, 2001). Martin (1986) determined that relationships with others, specifically parents and friends, seem to be strained upon the initial return from students studying abroad. This appeared to be a result of the adjustment of their parents to the students’ new-found independence as well as beliefs adopted by the student in the foreign culture (Martin, 1986).
Using Gullahorn and Gullahorn’s (1963) W-curve hypothesis, this study determines whether or not there are significant differences in levels of re-entry shock in first-year college students when looking specifically at generation status, gender, ethnicity, and parental attachment and what role these variables play, if any, in predicting re-entry shock.

![Figure 1. Gullahorn and Gullahorn W-curve Hypothesis.](image)

**Attachment Theory**

From examining the relationships of children and interactions with their caregivers, Bowlby (1979) theorized that secure attachments grow from social interactions with those who are loving and nurturing. Affective bonding occurs when parent and child remain close to one another. Even if the parent and child are separated, due to the secure attachment they are able to come back together and renew the bond.
Even if a third party tries to come between the parent and child, the intrusion is resisted due to the affective bonding (Bowlby, 1979).

Similar to Bowlby, Blatz (1966) found that children naturally have a need to explore their surroundings; however, if they know they can retreat to their parents for safety, the psychological effects of stress will be lessened. This gives children the security needed to engage in unfamiliar activities or experiences that may bring some level of discomfort. Knowing that a caring adult is nearby eases the tension that a child may feel. This concept is comparable to the secure base characteristic of Bowlby’s (1979) attachment theory.

Research with college students has shown that strong parental attachment has positively assisted with adjustment issues (Hannum & Dvorak, 2004; Kolkhorst, Yazedjian, & Toews, 2010); academic, social, and emotional development (Lapsley, Rice, & Fitzgerald, 1990; Mattanah et al., 2004); and psychological well-being (Armsden & Greenberg, 1987; Frey, Beesley, & Miller, 2006; Hannum & Dvorak, 2004; Kenny & Sirin, 2006). Strong parental attachments assist not only in adjusting to the college culture but also in positively navigating the many challenges that may arise throughout the college experience (Kolkhorst et al., 2010). Strong parental relationships play a positive role in the development of self-esteem and life satisfaction among college students (Armsden & Greenberg, 1987). However, students with problematic relationships with parents may experience more distress (Heister et al., 2009; Rice, Cunningham, & Young, 1997).
Bowlby’s (1979) theory of attachment will serve as the other theoretical basis of this study. The study will determine whether or not there are differences in level of parental attachment across generation status, gender, and ethnicity in first-year college students. In addition, the role of parental attachment in mediating re-entry shock will also be examined.

**Purpose of the Study**

The purpose of this study is to determine whether or not first-year, first-generation college students experience more or less re-entry shock upon returning to their family culture after being away at college than non-first-generation college students. The role of parental attachment, specifically the affective quality of relationships, parents as facilitators of independence, and parents as facilitators of support, will be examined as mediators for re-entry shock. Differences between the variables of gender and ethnicity will also be considered.

**Research Questions**

The following research questions inform this study:

RQ1. Is there a significant mean difference between generation statuses in regards to re-entry shock?

a. Are there significant mean differences among generation status and gender in regards to re-entry shock?

b. Are there significant mean differences among generation status and ethnicity in regards to re-entry shock?
c. Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regards to re-entry shock?

RQ2. Are there significant mean differences between first-generation and non-first-generation status in regards the affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

a. Are there significant mean differences among generation status and gender in regards to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

b. Are there significant mean differences among generation status and ethnicity in regards to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

c. Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regards to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

RQ3. To what extent, if any, do generation status, gender, and ethnicity predict re-entry shock of first-year students?

RQ4. To what extent, if any, do generation status, gender and ethnicity predict the affective quality of relationships?

a. To what extent, if any, do generation status, gender, and ethnicity predict parents as a source of support?
b. To what extent, if any, do generation status, gender, and ethnicity predict parents as facilitators of independence?

RQ5. Is re-entry shock for first-year college students mediated by the affective quality of relationships?

a. Is re-entry shock for first-year college students mediated by parents as a source of support?

b. Is re-entry shock for first-year college students mediated by parents as facilitators of independence?

**Significance of the Study**

Although much is known about the first-generation college students’ transition to college, little research has been done to determine what types of experiences these students have when they return to their family culture, a culture with usually little to no knowledge of what the college culture holds. Student affairs professionals need to understand and recognize the joys and conflicts that these students may face in order to support students through their crossing of these cultural boundaries. There must be more consideration given to the meaning made of the return home if these students are to be supported holistically, not only in their transition to the college culture, but also back to the family culture. If students studying abroad experience psychological and social readjustment issues when returning to their home culture—re-entry shock (Adler, 1981; Gaw, 2000; Nash, 1976; Rogers & Ward, 1993)—then it may be important to consider if first-generation college students experience these same challenges when returning to their family culture after an immersion into the college culture. That would mean that first-
generation-college students leave the family with one set of learned behaviors, language, practices, beliefs, and values that serve as shared connection with family members and sometimes return with a different set of learned behaviors, language, practices, beliefs, and values that serve as shared connections among the college culture. Because researchers (Adler, 1975; Gaw, 2000) recommend individuals returning from abroad should be better prepared with more training to re-acculturate to their home cultures, student affairs professionals working with first-generation college students may need to do more to better prepare these students for the challenges they may face upon the return home. Finally, consideration needs to be given to parental attachment since it has been found that a strong connection with parents eases adjustment to college (Kenny & Donaldson, 1991).

**Definition of Terms**

*Culture*—“An underlying cohesiveness to their description of the common behaviors, concepts and practices that arise when people interact regularly” (Schram, 2006, p. 96).

*Culture Shock*—“Adjustments to surroundings that are felt physically as well as psychological discomfort that results from subtler differences to which they must adapt” (Shalinsky, 2006).

*Ethnicity*—“The fact or state of belonging to a social group that has a common national or cultural tradition” (The Oxford American Dictionary Online, 2014).
Family Culture—The learned behaviors, language practices, beliefs and values that serve as shared connections within a home or community (The Oxford American Dictionary Online, 2012; Schram, 2006).

First-generation College Student—A student whose parents did not attend college to any degree (Bui, 2002; Choy, 2001; Inkelas et al., 2006; Pascarella et al., 2004; Sy, Fong, Carter, Boehme, & Alpert, 2011). The first in the family to go to college (Zwerling & London, 1992).

First-year Student—A first-time freshman in college.

Gender—The determination of either male or female as identified by the survey respondent.

Generation Status—The determination of either first-generation or non-first-generation.

Non-first-generation College Student—A student who is not the first in their immediate family to attend college, whether or not the person(s) attending college before him or her earned a degree. This definition includes students with siblings who attended college prior to their attendance (Bui, 2002; Choy, 2001; Inkelas et al., 2006; Pascarella et al., 2004; Sy et al., 2011; Zwerling & London, 1992).

Parental Attachment—“An enduring affective bond that can promote autonomous functioning and not as a tie that is synonymous with dependency” (Kenny, 1987, p. 18).

Re-entry Shock—(Used synonymously with reverse culture shock)—Returning to one’s primary culture after assimilating to a foreign culture which may result in a level of difficulty (Gaw, 2000).
CHAPTER II
REVIEW OF THE LITERATURE

In this chapter, a review of the literature will include an explanation of the general characteristics of first-year students. First, an overview of first-year, first-generation college students and first-year, non-first-generation college students will be provided. In addition, a description of family culture will be introduced. Next, an explanation of two theories, culture shock and reverse culture shock, will be explained. And finally, literature regarding several components of parental attachment including attachment theory, attachment and college adjustment, attachment and separation, and attachment and psychological well-being will be examined.

Generation Status: First-generation Versus Non-first-generation

According to the National Center for Education Statistics (2010), about 23.5 million people enrolled in college in the United States during the fall of 2010. Of that 23.5 million, approximately 30% of incoming college students were first-generation (Ramsey & Peale, 2010). Numerous definitions have been used to describe the first-generation college student. Some researchers have defined first-generation college students as those students whose parents did not attend college to any degree (Bui, 2002; Choy, 2001; Inkelas et al., 2006; Pascarella et al., 2004; Sy et al., 2011). Horn and Nunez (1988), as well as others, define first-generation college students as students who have parents without a degree beyond high school, although one or both parents may
have attended college (Dennis et al., 2005; Grant-Vallone et al., 2004; McCarron & Inkelas, 2006; Priebe, Ross, & Low, 2008; Smith & Zhang, 2010). Finally, although rare, some define first-generation as the first, even among siblings, in the family to go to college (Zwerling & London, 1992).

In addition to defining first-generation college students, researchers have used various terms to refer to their peer counterparts. McCarron and Inkelas (2006) referred to those who were not classified as first-generation college students as non-first-generation college students. However, while conducting their research they also broke non-first-generation college students into sub-classifications based on whether their parents had attained a bachelor’s degree, a master’s degree, or a Ph.D. or other professional degree. Similar to McCarron and Inkelas (2006), Pascarella et al. (2003) compared first-generation college students to “other students”; however, they realized that the category was too broad so they broke the “other student” category down into those students whose parents had high and moderate levels of postsecondary education. The approach that the aforementioned researchers used is sometimes employed to obtain a more sensitive analysis of the data (Pascarella et al., 2003). Aside from these groupings, non-first-generation college students have also been referred to as second-generation college students (Dennis et al., 2005; Smith & Zhang, 2010), traditional students (Terenzini et al., 1996), and continuing-generation college students (Sy et al., 2011).

**College Preparation and Choice**

Research regarding first-generation college students tends to point out many of the disadvantages that this population of students face compared to their non-first-
generation peers. Most of the difficulties discussed in the literature focus on preparation for college, transition to college, academic achievement in college, social adjustment, persistence and graduation, and challenges upon graduation. For instance, studies suggest that first-generation college students face significant challenges in preparation for college such as having less familial support than non-first-generation college students when pursuing college as an option (Terenzini et al., 1996), with little or no help from high school guidance counselors and teachers (Horn & Nunez, 1988; Smith, 2008). Billson and Terry (1982) found that parents of first-generation college students tend to be “moderately supportive” of student’s educational goals compared to non-first-generation parents who were “highly enthusiastic” about their students’ educational goals. In relation to parental support during the preparation process, Smith and Zhang (2010) reported that the parents of first-generation college students offer less help to their children during the college application process. Another pre-college characteristic that has emerged is the lack of knowledge and assistance in maneuvering the financial aid process (Smith, 2008; Tierney & Venegas, 2009). Obstacles and barriers are created due to limited or lack of cultural capital regarding post-secondary education processes.

**College Transition and Adjustment**

Once they make the choice to attend college and are admitted, first-generation college students next face the challenge of the adjustment to the new culture. Negotiating the transition to the college campus can be overwhelming and difficult for first-generation college students (Brown & Burkhardt, 1999; Pascarella et al., 2003; Riehl, 1994; Terenzini et al., 1996). According to some, first-generation college students are
coming to college with lower grade point averages (Pascarella et al., 2003), lower critical thinking ability (Terenzini et al., 1996), and a decreased ability in science (Pascarella et al., 2003). Once enrolled in college, first-generation college students register for fewer courses and complete fewer credit hours (Pascarella et al., 2003), possess lower ambitions for earning a degree (Terenzini et al., 1996), and are more likely to drop out their first semester (Riehl, 1994).

Although it appears that most of the research focuses on the deficiencies of first-generation college students, there are research findings that shed a positive light on this group of students. Terenzini et al. (1996) analyzed data collected during a three-year longitudinal study from the National Study of Student Learning (NSSL) and found that, although first-generation college students were less likely to finish college in four years as their non-first-generation peers, they were more confident of their degree path when entering college.

**Social Adjustment, Academic Adjustment, and Persistence**

Social adjustment and persistence have also been notable areas of study regarding first-generation college students. Research has revealed that first-generation college students spend more time working while in college than non-first-generation college students (Pascarella et al., 2003; Terenzini et al., 1996). In addition, they are less likely to join fraternities and sororities and other student organizations in general (Pascarella et al., 2003; Smith & Zhang, 2010).

Grant-Vallone et al. (2004) looked at factors contributing to retention and persistence of first-generation college students and students from low socioeconomic
backgrounds. They found that students with higher self-esteem and greater support from peers felt more socially engaged while in college. Students were more likely to persist and graduate when they felt socially and academically adjusted to their environment. Relationships at college proved to be more beneficial to adjustment than support from family (Grant-Vallone et al., 2004).

Inkelas et al. (2006) determined that more seamless academic and social transitions are made for first-generation college students through participating in living-learning communities. However, one unexplained finding worth mentioning was that faculty mentoring relationships with first-generation college students in the living-learning community had a negative influence on the student’s social adjustment. One possible reason is that time constraints such as building faculty connections, in addition to their time already spent working and studying, may be taking time away from building peer connections. Another reason may be attributed to the fact that students who are already having a difficult time with the social transition may be seeking out more meaningful relationships with faculty instead of peers as they feel more accepted by faculty than by other students (Inkelas et al., 2006). Aside from the issue with the faculty mentoring relationships, a focus on self-esteem building and connections with peers is important because colleges may potentially increase the persistence and graduation rates of first-generation college students by providing early intentional opportunities for engagement with other students within the social and academic contexts of the educational environment to help during transition.
According to Terenzini et al. (1996), first-generation college students also have lower ambitions for earning a degree (Terenzini et al., 1996). Consistent with other researchers, Billson and Terry (1982) found that they aspire less to earn degrees and are more likely to leave college before finishing (Bui, 2002; Hahs-Vaughn, 2004; Pascarella et al., 2004). Most often this decision is due to a lack of finances which leads to the acceptance of full-time jobs. In addition, it was found that students who had withdrawn from college also reported receiving different types of support from their parents depending on their generation status. First-generation students reported that their parents were emotionally supportive and non-first-generation students reported that their parents were more apt to support them financially as well as with other items such as academic support and transportation (Billson & Terry, 1982).

McCarron and Inkelas (2006) used longitudinal data collected from the National Educational Longitudinal Study conducted by the U.S. Department of Education’s National Center for Education Statistics to determine whether or not parental involvement influences degree aspirations of first-generation compared to non-first-generation college students. The findings of the study revealed that parental involvement did predict educational aspirations and the completion of a degree for non-first-generation college students; however, the importance of obtaining good grades was the best predictor for first-generation college students. Since level of involvement was studied in the home environment, such as conversations between students and parents about homework, classes, and college preparation, these findings may indicate that involving first-generation parents early in the educational process may increase
educational aspirations as well as reduce the effects of culture shock during the transition to college (McCarron & Inkelas, 2006).

In a positive light, Inman and Mayes (1999) found that first-generation college students are actually more concerned with academic characteristics of a college such as the course offerings and the academic rigor than non-first-generation college students. Although most studies indicate that first-generation students take fewer hours, Inman and Mayes (1999) found that there is not more than a three-hour discrepancy between the number of credit hours that first-generation students and non-first-generation students take, determining that there was no significant difference. Although Terenzini et al. (1996) found that first-generation college students are coming to college with lower levels of critical thinking abilities, they had equal gains in math and critical thinking skills to that of the non-first-generation college students during their second year. Similarly, Pascarella et al. (2003) found that they had greater academic gains in their second year and significantly greater writing skills when compared to non-first-generation college students. Finally, it appears that outcome goals of college also vary greatly between first-generation and non-first-generation students. Billson and Terry (1982) determined that job training and career preparation were the priorities of first-generation college students attending college while non-first-generation college students reported being more satisfied with the social aspects and their development of personal independence from their college experience.
**Demographic Differences**

First-generation and non-first-generation college students are very different in their demographic factors. Studies comparing first-generation college student demographics to non-first-generation college student demographics have found that first-generation college students are more often from lower socioeconomic backgrounds (Bui, 2002; Terenzini et al., 1996), more likely to be from ethnic minority families, more likely to speak a language other than English at home (Bui, 2002), more likely to be of Hispanic ethnicity, more likely to be older in age, and more likely to be supporting children (Terenzini et al., 1996). They are also more likely to attend college closer to home (Inman & Mayes, 1999). Due to some of these demographic factors, Bui (2002) found that some first-generation college students have an increased fear of failing in college, worry more about finances, and experience the extra pressures of helping their families upon graduation.

Dennis et al. (2005) studied first-generation ethnic minorities in relation to academic skill development necessary for adjustment for first-generation college students. The majority of the participants in the study identified as being Latino or Asian/Asian American. Results indicated that career aspirations and personal motivations are the most important predictors of academic skill development necessary for adjustment to college for first-generation ethnic minorities. Despite common perceptions, support from families to attend college and pressure from family members to succeed were not the most important factors in adjustment and success in the college environment for ethnic minorities (Dennis et al., 2005). Therefore, although much of the
research indicates disadvantages to being an ethnic minority first-generation college student due to lack of familial support or knowledge, students of ethnic minority backgrounds with well identified career and personal goals are able to be just as successful in the transition to college as students from ethnic majorities.

In addition to the research reviewed on first-generation college students, London (1992) discussed the cultural challenges that first-generation college students encounter as they leave their family culture and enter the college culture. First-generation college students in this transition sometimes find that they have to redefine relationships with family members, friends, and sometimes themselves as they slowly depart one culture and slowly assimilate into what may be a foreign culture as they enter the college culture for the first time (London, 1992).

**Culture**

Within the field of anthropology, culture has been defined in different ways. Anthropologist Edward Tylor offered the first comprehensive explanation of the term culture. He referred to the term as “that complex whole which includes knowledge, beliefs, art, morals, law, customs, and any other capabilities and habits acquired by man as a member of society” (Bouchard, 2006). In addition to Tylor’s definition, The Oxford American Dictionary Online (2012) defines culture as “the customs, arts, social institutions, and achievements of a particular nation, people, or other social group.” Schram (2006) defines culture as “an underlying cohesiveness to their description of the common behaviors, concepts and practices that arise when people interact regularly” (p. 96). According to the *Bouchard* (2006), two common components of culture are that
culture is shared, and it is learned. The fact that culture is learned means that anyone can acquire another’s culture as long as that person is capable of learning no matter what their own cultural norms may be. Therefore, family culture may be defined as the learned behaviors, language, practices, beliefs, and values that serve as shared connections within a home or community (The Oxford American Dictionary Online, 2012; Schram, 2006).

Based on the previous explanation of culture, family culture is a learned culture. When discussing family culture, we are making the assumption that these students come from environments that people would typically refer to as a family. When raised in a family environment with learned behaviors, language, practices, beliefs, and values, people take on those shared characteristics and become part of a culture, whether it is intentional or not. Children are raised to “respect their elders” or “do as they are told.” They have little choice in accepting or declining many of the family rituals and expectations.

First-generation college students are no different. Like all students, when a first-generation college student goes away to college, there is a period of adjustment that he or she must face. For the first-time, the student is introduced to a new culture—the college culture. As previously described for family culture, the college culture may be the learned behaviors, language, practices, beliefs, and values that serve as shared connections for the campus community. Adler (1975) stated that every person experiences new surroundings through his or her own set of values, beliefs and assumptions which may be better known as one’s culture. Therefore, we may assume that first-generation college students would also experience their new college culture in
this way. Although all first-time first-year students face some element of learning a new
culture, first-generation students’ experiences can be very different from their non-first-
generation peers. Another assumption is that non-first-generation college students have
probably heard stories from their parents about what to expect at college, whereas first-
generation students have not had the exposure to parents who have attended college.
Therefore, they have little or no knowledge from their family culture about what to
expect from the college culture. When they arrive on campus, their family culture may
come into conflict with the college culture, resulting in a period of psychological and
social adjustment. This period of adjustment may be referred to as “culture shock”
(Zhou, Jindal-Snape, Topping, & Todman, 2008).

Theory of Culture Shock

Shalinsky (2006) defines culture shock as “adjustments to surroundings that are
felt physically as well as psychological discomfort that results from subtler differences to
which they must adapt” (p. 653). “Culture shock precisely occurs when all that is taken
for granted no longer applies” (Bouchard, p. 654). Culture shock is most often used to
explain the adjustment of a traveler when experiencing a new country. Within the realm
of higher education, studies have looked at the impact of culture shock on students
studying abroad (Searle & Ward, 1990; Zhou et al., 2008). Some of these studies point
out that this phenomenon can be shaped by either sociocultural aspects of the traveler,
such as the need to fit in and by the ability to navigate the new culture or psychological
dimensions such as having feelings of loss or bereavement or the lack of a familiar social
support (Searle & Ward, 1990; Zhou et al., 2008).
Lysgaard (1955) suggested that psychological adjustment that result in moving abroad follows a U-shaped curve where initial adjustment feels good and exciting. When people first move abroad they make surface level contacts in the new culture that satisfies need for a brief period. However, after some time, more meaningful connections are needed so feelings of loneliness may emerge. Once they start to become involved in social groups within the new culture, feelings of belonging and group membership emerge, allowing the traveler to feel good again (Lysgaard, 1955; Oberg, 1960).

Although the term culture shock seems to stir up a negative connotation, some researchers view the experience of non-familiar adjustment through a positive lens. Although the experience may initially bring up feelings of isolation and loneliness, it can also be a time of personal growth, student development, and cultural learning (Adler, 1975; Zhou et al., 2008). Most people are really not aware of their own cultural characteristics until faced with others who are different from them. Once met with this disequilibrium, a period of growth takes place with one recognizing the differences in cultures and learning how to adapt to those differences (Adler, 1975). Adler’s (1975) concept of cognitive growth as it relates to sojourners aligns with some of the student development models that student affairs professionals use as a guide to working with students’ levels of development, such as Chickering’s seven vectors of college student development and Kohlberg’s theory of moral development (Evans, Forney, & Guido-DiBrito, 1998). Therefore, if looking through these lenses at the transitional commonalities of students, one could make the argument that the theory of culture shock
may not only apply to students studying abroad, but all students who experience a change in cultural differences, including those termed first-generation.

**Theory of Reverse Culture Shock**

Countless studies regarding first-generation college students and their transition and adjustment to the college culture have been done (Grant-Vallone et al., 2004; Inkelas et al., 2006; London, 1992; Stieha, 2010; Bradbury & Mather, 2009; Sy et al., 2011). In addition, just like studies conducted with students studying abroad and their experiences with culture shock, many studies have been done with students and other travelers on the phenomenon of reverse culture shock, also referred to as re-entry shock (Adler, 1981; Gaw, 2000; Nash, 1976; Rogers & Ward, 1993).

Building on the work of Lysgaard’s (1955) U-curve theory of adjustment, Gullahorn and Gullahorn (1963) applied the culture shock model to students returning home from educational exchanges abroad. A study of 400 American students studying in France and 5,300 American Fullbright and Smith-Mundt grantees who studied all over the world was conducted. Findings showed that students returning to their home cultures after adjusting to a foreign culture experience similar experiences associated with culture shock. They noted that reverse culture shock seems to be more intense the younger the student is. As a result of the study, Gullahorn and Gullahorn (1963) extended a second U-curve illustrating the readjustment to home culture, developing what is now known as the W-curve hypothesis to explain reverse culture shock. The expectations of the person remaining home is the primary difference between culture shock and reverse culture shock.
shock. The returner expects that nothing has changed in the home culture since they left but then comes to find out that that is not the case (Gullahorn & Gullahorn, 1963).

Reverse culture shock is similar to that of culture shock but it examines the complexities associated with returning to one’s home culture and readjusting after spending a significant amount of time in another culture (Gaw, 2000). Gaw’s (2000) findings from a study of American students returning from an overseas experience who did exhibit characteristics of reverse culture shock reported feeling depressed, alienated, isolated, lonely, anxious, and having interpersonal difficulties. Adler (1981) found that returning travelers either take on an active re-entry attitude that is more optimistic in nature or a more passive re-entry attitude that seems to have more pessimistic qualities. Those who actively face re-entry into their home culture change themselves to better fit back into their home environment. Her study also found that organizations seemed to favor the travelers with the active re-entry attitude more than those with the resistance to fit back into the environment (Adler, 1981). Therefore, Adler (1981) suggested that the transition back to one’s home culture is often more difficult than the initial adjustment to a culture different from one’s home culture.

Recommendations have arisen from the studies that have been done on cultural reentry. For example, due to discrepancies in positive expectations of students versus their actual experiences in returning home after studying abroad, Rogers and Ward (1993) suggested a need for more training and preparation of students reentering their home culture to help with the negative psychological symptoms that some students experience. One reason for these negative experiences of students returning home is
because of the expectation that the return home will be compatible with the newly learned social system and values. The student then finds himself or herself out of touch with their home social system and has difficulty readjusting (Gullahorn & Gullahorn, 1963).

Wielkiewicz and Turkowski (2010) discovered a research deficit of using comparison groups to study the impact of re-entry shock. Through their study, they sought to determine if differences in re-entry shock were typical in college students in general or just in those who had studied abroad. Therefore, they measured re-entry shock differences between high school and college students who had studied abroad and those who had not using Seiter and Waddell’s (1989) Re-entry Shock Scale. The main purpose of their study was to determine if interpersonal relationships were impacted by the study abroad experience. Re-entry shock scores were higher at a statistically significant level for those who had studied abroad compared to those students who had not. Therefore, they concluded that study abroad students were more skeptical of their home country resulting in an increase in re-entry shock of high school and college students who had studied abroad (Wielkiewicz & Turkowski, 2010).

Like students studying abroad, first-generation college students sometimes experience negative feelings or emotions while navigating between their family cultures and the college culture. According to London (1992), first-generation college students define group membership in their family cultures by the way they speak when they are with their family, in their dress, through grooming rituals, certain foods, music, and other family practices. By the nature of higher education and what it provides, first-generation college students often find themselves entering a new social class as a result of their
education. Although some look forward to the upward mobility, others try to determine the reactions of those within their family culture and whether or not this new status will result in the gain of a more promising life or in the loss of one’s family culture and practices as a result of the changes (London, 1992). London (1992) interviewed first-generation college students about their experiences returning to their family culture. One woman discussed a new taste in music that she acquired after taking a college course:

It’s really hard for me at home. It’s like living in both worlds. I come here and I’m one person, and I go home and I’m the other person that they knew, but not really. I think everybody is kind of wary and leery of me – my younger brothers, my sisters, my father and mother, old boyfriends, or people I still socialize with when I go home. It’s not the same because, well, I’m not the same…It makes it real hard. The other day I put some classical music on the radio on purpose. I like it, and I put it on in my room once in a while, but this time I was in the living room. I wanted to see what would happen. First thing I get is someone says, “Shit, oh, Jesus, you’re going to go to poetry readings next, ooooh! We won’t be able to talk to you anymore.” My sister, she really went nuts. There were a couple of friends there, too having fits. They were looking at me, like “What’s the matter with this kid?” (p. 8)

The quotation illustrates a student who is gauging the reactions of her family and the possible consequences of breaking away from her family culture by taking on some of the practices of her new college culture (London, 1992). For many first-generation college students, this scenario may be familiar when reentering their family culture.

**Parental Attachment**

Home social systems have changed over the years. Currently, parents and their college-aged children are closer than ever in their relationships with one another. Many parents play a supporting role for their students during the selection and transition to college (Hiester, Nordstrom, & Swenson, 2009; Taub, 2008). Terms such as “helicopter
parents” have risen out of today’s times in which parents seem to be more involved in their students’ lives than in the past. Parents have spent countless hours actively involved in planning their child’s life from extracurricular activities, class schedules, social calendars, and the college selection process (Coburn, 2006). Colleges and universities have tried to embrace the involved parent by developing new programs and services within the university structure such as parent orientations and services specifically aimed at assisting parents and families.

Studies have shown that family relationships do play a role in the success of the college student. In a study of 102 first-year students, Hannum and Dvorak (2004) found that students who have a stronger attachment to their fathers have greater success in adjusting socially to college while students who have a stronger relationship with their mothers have greater psychological adjustment in college. Because family dynamics, including conflict, play a large role in student success, it is important for higher education professionals to understand the family environment from which students come to college in order to assist in the adjustment period (Hannum & Dvorak, 2004; Schultheiss & Blustein, 1994). However, it is also important to note that due to the small sample of convenience in Hannum and Dvorak’s (2004) study, the results may not be generalizable to other student populations.

**Attachment Theory**

Building on the early work of Freud, Bowlby followed by Ainsworth closely examined the relationships of children and their caregivers (Bretherton, 1992). While volunteering at a school for maladjusted children in the late 1940s, Bowlby was intrigued
by the development of two young boys. Upon further study of these boys, Bowlby was
convinced that the development of a child’s personality was directly related to the
interaction and early experiences that a child had with his or her parents. Based upon
these observations and early studies, Bowlby’s theory of attachment emerged (Ainsworth

It will be remembered that attachment theory was formulated to explain certain
patterns of behavior, characteristics not only of infants and young children but
also adolescents and adults that were formerly conceptualized in terms of
dependency and over-dependency. In its original formulation observations of
how young children respond when placed in a strange place with strange people,
and the effects such experiences have on a child’s subsequent relations with his
parents, were especially influential. (p. 119)

There are three main points on which attachment theory focuses: (a) the
importance of strong emotional ties between a child and his or her caregiver, (b)
treatment from parents and the impact that it has on the child’s development, and (c) and
the likely persistence of developmental pathways over time (Bowlby, 1988). Original
theories of attachment indicate that the reason a baby feels attached to his or her mother
is because she is the one who feeds him (Bowlby, 1988). It was believed that there were
two levels associated with attachment, food being a primary level and the personal
relationship with the parent being the secondary level. However, Bowlby (1988)
disagreed with this early theory. He challenged this notion by arguing that if this was the
case, older children should be attached to whoever would feed them. Through his
extensive research regarding attachment theory, Bowlby (1988) determined that children
become attached to parents through social interactions. Attachment provides protection
and a safe haven to the child (Bowlby, 1979). The child attaches himself or herself to a
parent who is loving and nurturing. Even though at times, the child may experience
occasions of distress, those with positive attachments will return to the caregiver to find
comfort and support during these uncomfortable times (Bowlby, 1988). In addition,
children will go out and explore on their own; however, secure attachment allows them
return back to a safe base. Bowlby (1979) also acknowledged that at times the anxiety of
separation can be decreased or non-existent altogether, which may be falsely interpreted
as maturation rather than the defensive mechanism that it is.

During those same years, another researcher by the name of Blatz had developed
a similar theory regarding the security of children. Blatz (1966) believed that children
had a natural inclination to explore their surroundings even when the surroundings may
be frightening to the child. However, if children know they have a parent or stable figure
that they can retreat to for times of comfort even when frightened, children will
experience feelings of security (Blatz, 1966). As children develop and learn coping
mechanisms, they will eventually develop their own feelings for independent security

Expanding on the work of Blatz (1966), Ainsworth, Blehar, Waters, and Wall
(1978) set out to further explain attachment bonds between a parent and a child. Their
study known as “The Strange Situation,” consisted of a series of eight observations used
to study how a baby would react in situations involving their own mother and a stranger
(Ainsworth et al., 1978). During a series of events, the child was left and reunited with
his or her mother. Results of the study showed that baby behavior was classified based
on three types of attachment: (a) secure, (b) ambivalent-insecure, or (c) avoidant-insecure. Babies who were securely attached to their mother used her as a secure base for exploring unfamiliar surroundings. Although the baby may or may not have showed signs of distress in the absence of his or her mother, the baby showed obvious signs of happiness when reunited with his or her mother. The babies classified with ambivalent-insecure attachment appeared to be in more distress or angrier when they were separated from the mother and showed a noticeable connection when their mother was near. The babies with avoidant tendencies tended to avoid contact with the mother upon the reunion. These babies were less likely to cling to their mothers or show signs of distress when put down. They also treated an interaction with a stranger the same way they would during an interaction with their own mother. In short, “The Strange Situation” looked at attachment bonds through an examination of how much or how little babies were willing to explore either with their mother present or in the absence of their mother, and how a baby reacted to the mother when she was present, absent, or upon being reunited (Ainsworth et al., 1978).

Although the work of Ainsworth (1989), Bowlby (1979, 1988) and Blatz (1966) focused on infants and toddlers, Main began studying parental attachment in six-year-old children and eventually adolescent attachment (Bretherton, 1992). Her development of the Adult Attachment Interview, in cooperation with her colleagues in 1984, has been used to study attachment development at later stages of the lifespan (Ainsworth & Bowlby, 1991). As a result of her work, Main later added a fourth classification of attachment known as disorganized-disoriented (Main & Soloman, 1990). Characteristics
of this type of attachment include a fear of the parent, which results in outright avoidance of the caregiver usually as a result of negative interactions or abuse (Main & Soloman, 1990). Main’s interest in adolescent attachment later evolved into future research from others on late-adolescence and adult attachment (Kenny, 1987).

**Attachment and College Adjustment**

Although early parental attachment studies were conducted mostly on infants and children, more studies have shown that attachment continues to play an important role into adolescence (Kenny & Rice, 1995; Lapsley et al., 1990; Lyddon, Bradford, & Nelson, 1993; Rice et al., 1997; Schultheiss & Blustein, 1994) and adulthood (Kenny, 1994; Kenney & Donaldson, 1991) especially when considering how it mediates the adjustment to college (Lapsley et al., 1990; Rice et al., 1997). As described by Kenny (1987), “attachment is viewed as an enduring affective bond that can promote autonomous functioning and not as a tie that is synonymous with dependency” (p. 18).

Lapsley et al. (1990) explored personal and social identity as it relates to attachment with parents and peers. Studying 253 first-year and upper-class students, they found that personal and social identity is mediated by parental and peer attachment in both groups. As with this study, other studies have found that academic and emotional adjustment is predicted by parental attachment (Mattanah et al., 2004; Rice et al., 1997; Schultheiss & Blustein, 1994).

Mattanah et al. (2004) studied 404 college students at a mid-size university in the Northeast to determine whether the separation-individuation process mediated the effects of secure attachment relationships on adjustment to college. The results of the study
indicated that both secure attachment and a significant amount of separation-individuation predicted positive levels of adjustment to college, specifically regarding academic, social, and emotional factors. The study was the first to show that the level of separation-individuation mediated the effects of attachment on college adjustment (Mattanah et al., 2004).

**Attachment and Separation**

In addition to attachment and how it relates to college adjustment, studies have explored attachment relationships and separation factors. The stability of secure attachment over time seems to remain relatively constant (Kenny, 1990; Rice, Fitzgerald, Whaley, & Gibbs, 1995). Therefore, attachment bonds with parents do not seem to diminish upon separation from the home. Kenny (1994) concluded that there are few gender differences in regard to attachment except when parents are perceived as a source of emotional support. It was also found that over the course of the college career, students’ attachment relations with parents remain constant (Kenny, 1990; Rice et al., 1995), and women are more likely than men to return to their parents for emotional support (Kenny, 1994). Similarly, Schwartz and Buboltz (2004) revealed a balance between psychological separation and attachment for both male and female college students. In this particular study, it was shown that fathers played an important role in equalizing the attachment and separation from the home. Students who have insecure attachment bonds with their fathers were more at risk for social and emotional deficiencies when entering college (Rice et al., 1997). Heister et al. (2009), found that women’s parental attachment improved over time and men’s actually decreased over time.
while at college, but only for those living at home. Therefore, it appears that distance may increase attachment levels between students and parents.

**Attachment and Psychological Well-being**

As attachment theory indicates, stress can heighten feelings of the need for attachment, especially for students living away from home (Kenny, 1994). This heightened level of the need for attachment may not be beneficial for first-generation college students who are already under extreme pressure to succeed and have little guidance from family members. Conversely, some interpretations of attachment theory indicate that a secure level of attachment gives students the self-confidence to succeed even when far away from home. Parents should realize that their accessibility and support to their college-aged children may serve as a conduit for facilitating autonomy rather than hindering their development (Kenny, 1994).

Numerous studies show that strong attachments to family result in lower levels of stress and anxiety in late adolescence. Until Kenny (1987) studied the extent and function of attachment following the late adolescent’s separation from home, most research had focused on the parent-child bond. Kenny’s (1987) landmark study of 173 first-year students revealed that students who described their relationships with parents as high, experienced low levels of stress in the separation process. Kenny (1987) concluded that, like Ainsworth et al.’s (1978) theory of secure attachment, late-adolescents experienced the same feeling of well-being when support was high. Additionally, Kenny and Donaldson (1991) looked at the family structure and attachment in relation to social competence and psychological well-being in a sample of first-year students. Again,
corresponding with Ainsworth et al. (1978), students who had secure attachment at home had an easier time adapting to college. A decrease in stress was reported during adjustment when students felt an increased emotional connection to a parent at home (Kenny & Donaldson, 1991). Other studies have concluded similar results concerning student well-being (Armsden & Greenberg, 1987; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994; Heister et al., 2009).

Huff (2001) looked at differences between “missionary kids” (MKs) and “non-missionary kids” enrolled in college to determine differences between the two groups on the measures of parental attachment, perceived social support, reverse culture shock, and college adjustment. She found that MKs, children who grow up in a culture different from their parents’ home culture, found that their parents were more supportive in facilitating independence. Missionary kids also reported greater intercultural and interpersonal differences than non-missionary kids, which she attributed to their experience returning to the United States to attend college. Huff (2001) found no significant relationship between reverse culture shock and parental attachment. However, one of the limitations of her study was the small sample size of missionary kids ($n = 45$), which may have lacked statistical power attributing to the non-significant results (Huff, 2001). This is an important study as this is one of the few that links parental attachment to reverse culture shock.

Unlike secure attachment and its ability to foster autonomy, insecure attachment has been shown to cause problems related to college adjustment and emotional issues (Rice et al., 1997). Therefore, actions such as calling parents to discuss problems or
concerns are more likely to illustrate secure base behavior in contrast to what some view as parental dependency (Kenny & Rice, 1995). Secure attachment relationship is affiliated with psychological resilience and happiness rather than maladaptive behavior. As studies have shown, the importance of secure attachment with family consistently supports positive adjustments and higher levels of psychological well-being (Armsden & Greenberg, 1987).

**Conclusion**

First-generation college students are a growing population of college freshmen. Although support services are available for the transition to the college culture for this population of students, little is known about how well-prepared these students are for re-entry to their family culture after being away at college. First-generation college students who have entered and adjusted to a new college culture may have new priorities, new belief systems, new ways of thinking, or new images of themselves. They may have questioned the convictions they were born and raised with and opened their eyes to new experiences. Students in Nash’s (1976) study noted taking on characteristics of those of the host culture. From spending time in and taking on the characteristics of their host environment, these students transitioned from possessing qualities of their home culture to taking on qualities of their newly learned culture (Nash, 1976). By stepping into a new environment, and sometimes a new social class, in some ways first-year students have experienced what it means to leave their original self behind.

Students with perceptions of strong parental attachment viewed themselves as having higher self-esteem, reduced distress, and an easier transition to college (Kenny &
Donaldson, 1991). Consequently, higher attachment results in better adjustment. Heister et al., (2009) found that both males and females with strained relationships with their parents reported more problems with adjustment to college. For that reason, if results of the current study coincide with Heister et al. (2009), students who report stronger bonds with their parents may experience less re-entry shock when returning to their family culture. In addition, Nash (1976) found that students who studied abroad for a year had an increased level of personal autonomy, and they experienced an expansion or change in how they see themselves. Therefore, although re-entry shock may be viewed as a negative experience, positive developmental changes may come from it.

There is an apparent gap in the research about the phenomenon of re-entry shock on all students returning to their family cultures after being away at college. Although there are many studies regarding study abroad students and the impact of re-entry shock on their home culture (Adler, 1981; Gaw, 2000; Nash, 1976; Rogers & Ward, 1993), there are currently no studies that exist on re-entry shock regarding first-generation college students and their return to their family cultures after being away at college. In addition, there are numerous studies on parental attachment regarding college transition and separation (Heister et al, 2009; Kenny, 1990; Rice et al., 1995; Rice et al., 1997; Schwartz & Buboltz, 2004), but the literature lacks attachment studies on the experiences of students from underrepresented groups, such as first-generation college students. A study of first-year student experiences of returning home, first-generation and non-first-generation, would provide student affairs professionals an understanding of whether or not more needs to be done to prepare students for the return to their family cultures.
Finally, as first-generation college students continue to access post-secondary education at increasing rates, practitioners should understand these students’ needs prior to sending them back to their family culture in which parents and siblings are not able to relate to their new experiences.
CHAPTER III
RESEARCH METHODOLOGY

This chapter focuses on the methodology used to explore the transition of first-year college students back to their family culture after being away at college. The purpose of this study was to examine whether first-year, first-generation college students’ experiences to first-year, non-first-generation college students’ experiences differ significantly and whether or not gender and ethnicity play a role in any differences uncovered. Specifically, the impact of re-entry shock was examined for both groups of students to determine whether or not level of attachment mediates levels of re-entry shock for first-year students. In this chapter a description of the participants, sampling method, data collection, and data analyses are described.

Research Questions and Hypotheses

The specific research questions and hypotheses that guided this study are:

RQ1. Is there a significant mean difference between generation statuses in regard to re-entry shock?

H₀: There is no significant mean difference between generation statuses in regard to re-entry shock.

H₁: There is a significant mean difference between generation statuses in regard to re-entry shock.
a. Are there significant mean differences among generation status and
gender in regard to re-entry shock?

H₀: There are no significant mean differences among generation status
and gender in regard to re-entry shock.

H₁: There are significant mean differences among generation status and
gender in regard to re-entry shock.

b. Are there significant mean differences among generation status and
ethnicity in regard to re-entry shock?

H₀: There are no significant mean differences among generation status
and ethnicity in regard to re-entry shock.

H₁: There are significant mean differences among generation status and
ethnicity in regard to re-entry shock.

c. Are there significant mean differences in the interaction of generation
status, gender, and ethnicity in regard to re-entry shock?

H₀: There are no significant mean differences in the interaction of
generation status, gender, and ethnicity in regard to re-entry shock.

H₁: There are significant mean differences in the interaction of
generation status, gender, and ethnicity in regard to re-entry shock.

RQ2. Are there significant mean differences between first-generation and non-
first-generation status in regard the affective quality of relationships,
parents as facilitators of independence, and parents as a source of support?
H₀: There are no mean differences between first-generation and non-first-generation status in regard the affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

H₁: There are significant mean differences between first-generation and non-first-generation status in regard the affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

a. Are there significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

H₀: There are no significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

H₁: There are significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

b. Are there significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?
H$_0$: There are no significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

H$_1$: There are significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

c. Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

H$_0$: There are no significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

H$_1$: There are significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

RQ3. To what extent, if any, do generation status, gender and ethnicity predict re-entry shock of first-year students?

H$_0$: Generation status, gender and ethnicity do not predict re-entry shock of first-year students.
H1: Generation status, gender and ethnicity do predict re-entry shock of first-year students.

RQ4. To what extent, if any, do generation status, gender and ethnicity predict the affective quality of relationships?

H0: Generation status, gender and ethnicity do not predict the affective quality of relationships.

H1: Generation status, gender and ethnicity do predict the affective quality of relationships.

a. To what extent, if any, do generation status, gender and ethnicity predict parents as a source of support?

H0: Generation status, gender and ethnicity do not predict parents as a source of support.

H1: Generation status, gender and ethnicity do predict parents as a source of support.

b. To what extent, if any, do generation status, gender and ethnicity predict parents as facilitators of independence?

H0: Generation status, gender and ethnicity does not predict parents as facilitators of independence.

H1: Generation status, gender and ethnicity does predict parents as facilitators of independence.

RQ5. Is re-entry shock for first-year college students mediated by the affective quality of relationships?
H₀: Re-entry shock is not mediated by the affective quality of relationships.

H₁: Re-entry shock is mediated by the affective quality of relationships.

a. Is re-entry shock for first-year college students mediated by parents as a source of support?

H₀: Re-entry shock is not mediated by parents as a source of support.

H₁: Re-entry shock is mediated by parents as a source of support.

b. Is re-entry shock for first-year college students mediated by parents as facilitators of independence?

H₀: Re-entry shock is not mediated by parents as facilitators of independence.

H₁: Re-entry shock is mediated by parents as facilitators of independence.

**Research Design**

This study’s research questions were answered using a cross-sectional quantitative research design. Differences among first-year students’ levels of re-entry shock and parental attachment in accordance with their generation status were explored through the use of demographic questions, an adjusted Reentry Shock Scale designed by Seiter and Waddell (1989) and Kenny’s (1987) Parental Attachment Questionnaire (PAQ). This particular research design made it possible to look at existing relationships between the variables during a particular time in the life of a first-year college student.
Data Collection

The final instrument (see Appendix A) comprised of the adjusted Reentry Shock Scale designed by Seiter and Waddell (1989) and Kenny’s (1987) Parental Attachment Questionnaire. Data was distributed electronically to 2,293 first-time first-year students at a large, 4-year public research institution in the Southeastern United States immediately following the winter break. The sample was chosen from all respondents who self-identified as first-year students living in on-campus housing or living in off-campus housing as long as they were not currently living in their family home or with family members.

To determine who would be included in the sample, participants were asked, “Did you spend any time with your family during winter break?” If “no” was answered to this question, the respondent was immediately taken to the end of the survey. Students were also asked to answer a series of demographic questions to determine if they met the characteristics of the population being studied. One question included, “Was the fall of 2014, the first-time that you have ever attended college?” If they answered “no,” they were not included in the sample. Although this question was limiting in nature, it was intended to make this study generalizable to first-time, first-year students at large research institutions with similar demographics who do not have any prior experience in a college setting. Respondents were also asked, “Which best describes your current living situation?” If they answered “live in university-owned housing,” or “live off campus, but not with family,” they were included, but if they chose “live with family,” they were not. Finally, to determine if they were considered a first-generation college
student or a non-first-generation college student according to this study, they were asked a series of questions. Those answering “yes” to their mother’s and father’s highest level of education as “some high school” or “high school / GED” and answering “no” to having siblings or “yes” to having siblings but being the first sibling to go to college were considered first-generation for the purpose of this study.

Email addresses of all first-time, first-year students were accessed by request from the university’s registrar’s office. An 82-question Qualtrics survey and invitation to participate (see Appendix B) in the study was then emailed to 2,293 students. The initial email introduced the research, the purpose of the study, and included an informed consent (see Appendix C) approved by the Institutional Review Board (IRB). Respondents were assured that their participation was voluntary and were informed of the potential risks, potential benefits, compensation and costs, and confidentiality and privacy statements. Participants who answered “no” on whether or not they wanted to participate were immediately taken to the end. Participants were invited to register in a separate survey for a chance to win one of four $25 Amazon gift cards. Reminders to complete the survey were sent four days after the initial survey launch and then again eight days later (see Appendix D). Initially, the survey was to remain open for two weeks; however, due to a low response rate, approval was sought from IRB to keep the survey active one extra week. Therefore, an extra reminder to participate was sent out to all who had not yet completed the survey (see Appendix E).
Participants

Responses from 281 participants were collected resulting in an initial response rate of 12.3%. Not all respondents completed the entire instrument. A final sample size of 178 was used to measure re-entry shock and the subscales of the PAQ after 103 incomplete surveys were discarded from the study, resulting in a final response rate of 7.8% for the study.

To determine sample size, G*Power was used with alpha (α) set at .05, using a moderate effect size set at .25 and power set at .80. The analysis determined that 180 respondents would be needed for the study. Because an anticipated response rate was set at approximately 30%, the actual response rate was lower than expected and two participants short of the 180 response target.

Complete responses were gathered from 178 first-year college students. Most participants answered the questions about their parents’ education levels and the questions about whether or not they had siblings who had attended college in a manner that identified them as non-first-generation college students (91.6%). Only 15 participants (8.4%) identified as first-generation college students (see Table 1).

Table 1

<table>
<thead>
<tr>
<th>Generation Status</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-first-generation</td>
<td>163</td>
<td>91.60</td>
</tr>
<tr>
<td>First-generation</td>
<td>15</td>
<td>8.40</td>
</tr>
<tr>
<td>Totals</td>
<td>178</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Women made up 80.3% of the total number of participants ($n = 143$), whereas only 18.5% identified as male. The remaining 1.1% identified as a gender other than male or female. Table 2 illustrates participants by gender frequency and percentage.

Just over half of all participants identified as Caucasian/White ($n = 97$). Fifty-four (30.3%) of the participants identified as African American/Black, which closely represents the institution from which the sample was obtained, as 27% of undergraduate students identify as African American. Only small percentages of students (5.6%, 3.9%, 1.1%, and 4.5%) identified as Latina/o Hispanic, Asian/South Asian, Native American, or other, respectively. See Table 3 for the frequency and percentage distributions by ethnicity.

Table 2
Gender by Frequency and Percentage

<table>
<thead>
<tr>
<th>Gender</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>33</td>
<td>18.50</td>
</tr>
<tr>
<td>Female</td>
<td>143</td>
<td>80.30</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>178</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3
Ethnicity by Frequency and Percentage

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>$n$</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian/White</td>
<td>97</td>
<td>54.50</td>
</tr>
<tr>
<td>African American/Black</td>
<td>54</td>
<td>30.30</td>
</tr>
</tbody>
</table>
Table 3

Cont.

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latina/o Hispanic</td>
<td>10</td>
<td>5.60</td>
</tr>
<tr>
<td>Asian/South Asian</td>
<td>7</td>
<td>3.90</td>
</tr>
<tr>
<td>Native American</td>
<td>2</td>
<td>1.10</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>4.50</td>
</tr>
<tr>
<td>Totals</td>
<td>178</td>
<td>100.00</td>
</tr>
</tbody>
</table>

**Instrumentation**

The instruments used in this study included an adjusted scale of Seiter and Waddell’s (1989) Reentry Shock Scale, Kenny’s (1987) Parental Attachment Questionnaire (PAQ), and several demographic questions. The completion time of the entire survey took approximately 15 minutes. Respondents completed an 82-question survey comprised of two scales and the demographic questions, measuring different variables in the research study. The second scale composed of three subscales that totaled 55 questions measured level of parental attachment. The remaining 11 questions consisted of demographic questions and questions used to identify the specific population of the study.

**Reentry Shock Scale (Seiter & Waddell, 1989)**

Re-entry shock was measured using a modified version of the Reentry Shock Scale (Seiter & Waddell, 1989). The original measure, a 16-item scale, was developed to specifically measure level of re-entry shock upon return to a student’s home country after
studying abroad. Responses on Seiter and Waddell’s (1989) original Reentry Shock Scale were gathered using a 7-point Likert scale where 1 was equal to “Strongly Disagree” and 7 was equal to “Strongly Agree.” The original measure produced an alpha coefficient of a .83, which is considered to indicate good reliability (Seiter & Waddell, 1989). However, the current study used a 5-point Likert-type response scale where 1 was equal to “Strongly Agree” and 5 was equal to “Strongly Disagree.” The development of the revised version is described below.

Pilot study. In October of 2013, a modified re-entry shock scale was tested for reliability in a small pilot study of first-year students enrolled in a freshmen seminar class at a large public research university located in the southeast region of the United States. Each of the 280 students registered for the class was sent an electronic survey on the day they returned from a four-day fall break, approximately 6 weeks into the fall semester. Seiter and Waddell’s (1989) original scale was modified to fit the pilot study. Because the original instrument was designed to measure experiences of students returning from study abroad, minor modifications were made to the instrument. To aid in clarity and continuity for respondents throughout the entire instrument, the re-entry shock scale was reduced to a 5-point Likert scale from a 7-point Likert scale, matching the layout of the second scale within the pilot study’s instrument. In addition, wording modifications were made. The original scale consisted of statements such as, “When I returned, people did not seem that much interested in my experiences abroad” to statements such as “I missed the foreign culture where I stayed.” Consequently, changes were made to 11 of the 16 statements to make the statements accurate for the current study. The reliability for the
sample \((N = 41)\) was .96 for the entire instrument and ranged from .85 to .95 for each of the four scales. Due to wording adjustments and a decrease from a 7-point Likert scale to 5 points on Seiter and Waddell’s (1989) Reentry Shock scale, the focus of the pilot study was confirming the reliability of the scale to measure the construct of re-entry shock, which resulted in a Cronbach’s alpha of .86. Therefore, the wording adjustments and reduction of the Likert scale still resulted in good internal consistency.

**Current study.** For the current study, the researcher received permission from John Seiter (see Appendix F), one of the original authors of the Reentry Shock Scale, to use a modified version of the original scale. The modified version of the re-entry shock scale employed in the pilot study was used as the final instrument. The scale measured re-entry shock of first-year freshmen college students returning to their family culture after being away at school. The re-entry shock subscale consisted of 16 items with statements such as, “When I returned home, people did not seem interested in my experiences at college” and “My friends and family have pressured me to ‘fit in’ upon returning home.” The reported Cronbach’s alpha for the current re-entry shock subscale was \(\alpha = .88\), which indicates that although the study utilized this measure with first-year college students returning home from school instead of students returning from study abroad, the internal consistency of the scale remained high.

**Parental Attachment Questionnaire (Kenny, 1987)**

Parental attachment was measured using the original Parental Attachment Questionnaire (PAQ; Kenny, 1987). The PAQ, constructed to measure attachment in young adults and adolescents (Ainsworth et al., 1978), consists of 55-items. Responses
were obtained using a 5-point Likert-type response format where 1 is “not at all, 0-10\%” and 5 is “very much, 91-100\%.” The PAQ consists of three subscales: Affective Quality of Relationships consisting of 27 questions, Parents as Facilitators of Independence consisting of 14 questions, and Parents as Source of Support consisting of 12 questions. The PAQ measures perceptions of “parental availability, understanding, acceptance, respect for autonomy, interest in interaction with parents and affect toward parents during visits, student help-seeking behavior in situations of stress, and satisfaction with help obtained from parents” (Kenny, 1994, p. 400). Students were asked to self-report on statements that described relationships with their parents in a single rating, not considering each parent separately. However, if participants came from families in which one parent is deceased, not living in the home, or two parents are no longer married, students were instructed to respond considering the living parent or the parent with whom they feel closer. Subscale scores are calculated for each participant (Kenny, 1987).

Test-retest reliability and internal consistency of the PAQ over a two-week period was reported by Kenny (1987) as .92 for the entire instrument. Cronbach’s alpha was reported as .96 for the “Affective Quality of Relationships” scale, .88 for the “Parents as Source of Support” scale, and .88 for the “Parents as Facilitators of Independence” scale. Support for the validity of the instrument was established by a significant correlation of the PAQ’s three subscales to the subscales of Moos’s (1985) Family Environment Scale (Kenny, 1994). Kenny’s (1987) scales were compatible with Ainsworth et al.’s (1978) theory of attachment with young adults and adolescents (as cited in Kenny, 1994, p. 400).
Prior to administering the study, the researcher sought approval from the original author to use the PAQ (see Appendix G). The study produced an excellent internal consistency with a Cronbach’s alpha of $\alpha = .95$ for the total scale. In addition, the subscales also indicated strong reliability with a Cronbach’s alpha of $\alpha = .94$ for the Affective Quality of Relationships subscale, $\alpha = .86$ for the Parents as a Source of Support subscale, and $\alpha = .86$ for the Parents as Facilitators of Independence subscale indicating that all measures of internal consistency ranged from good to excellent which proved to illustrate high correlations between items.

**Data Analysis**

The data were analyzed using various statistical analyses. Table 4 illustrates the research design matrix used for the study, describing each analysis used for each of the study’s research questions. Descriptive statistics were calculated to provide a clear picture of the information obtained. The rate to test for the probability of a Type I error was set to .05 for each test of statistical significance.

Table 4

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analyses</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1:</strong> Is there a significant mean difference between generation statuses in regard to re-entry shock?</td>
<td>Seiter and Waddell’s Reentry Shock Scale and demographic questions</td>
<td>Descriptives, Pearson correlation, ANOVA</td>
<td>Determines whether there are significant mean differences between groups of students in regard to re-entry shock</td>
</tr>
</tbody>
</table>
Table 4
Cont.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analyses</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1 (cont.)</strong></td>
<td>3 IV = generation status, gender, ethnicity</td>
<td>Descriptives</td>
<td>Determines whether there are significant mean differences between groups of students in regard to each of the PAQ subscales</td>
</tr>
<tr>
<td>a) Are there significant mean differences among generation status and gender in regard to re-entry shock?</td>
<td>1 DV = Re-entry shock</td>
<td>Pearson correlation</td>
<td></td>
</tr>
<tr>
<td>b) Are there significant mean differences among generation status and ethnicity in regard to re-entry shock?</td>
<td></td>
<td>MANOVA</td>
<td></td>
</tr>
<tr>
<td>c) Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regard to re-entry shock?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RQ2:** Are there significant mean differences between first-generation and non-first-generation status in regard to the affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

Kenny’s Parental Attachment Questionnaire and demographic questions

3 IV = generation status, gender, ethnicity

3 DV = Affective quality of
Table 4

Cont.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analyses</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ2 (cont.)</strong></td>
<td>a) Are there significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?</td>
<td>relationships, parents as source of support, parents as facilitators of independence.</td>
<td></td>
</tr>
<tr>
<td>Research Question</td>
<td>Variables</td>
<td>Statistical Analyses</td>
<td>Utility</td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------</td>
<td>----------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>RQ3:</strong> To what extent, if any, do generation status, gender and ethnicity predict re-entry shock of first-year students?</td>
<td>Seiter and Waddell’s Reentry Shock Scale and demographic questions</td>
<td>Multiple Linear Regression</td>
<td>Determines whether generation status, gender, and ethnicity predicts re-entry shock of first-year students</td>
</tr>
<tr>
<td>3 IV = Generation status, gender, and ethnicity</td>
<td>1 DV = Re-entry shock</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RQ4:</strong> To what extent, if any, do generation status, gender and ethnicity predict the affective quality of relationships?</td>
<td>Kenny’s Parental Attachment Questionnaire and demographic questions</td>
<td>Multiple Linear Regression</td>
<td>Determines whether generation status, gender, and ethnicity predicts the affective quality of relationships, parents as a source of support, or parents as a source of independence</td>
</tr>
<tr>
<td>a) To what extent, if any, do generation status, gender and ethnicity predict parents as a source of support?</td>
<td>3 IV = Generation status, gender, and ethnicity</td>
<td>3 DV = affective quality of relationships, parents as a source of support, or parents as a source of independence</td>
<td></td>
</tr>
<tr>
<td>b) To what extent, if any, do generation status, gender and ethnicity predict parents as facilitators of independence?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4

Cont.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analyses</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ4 (cont.)</td>
<td>source of independence</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RQ5</strong>: Is re-entry shock for first-year college students mediated by the affective quality of relationships?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Is re-entry shock for first-year college students mediated by parents as a source of support?</td>
<td>Seiter and Waddell’s Reentry Shock Scale, Kenny’s Parental Attachment Questionnaire, and demographic questions</td>
<td>Pearson correlation</td>
<td>A Pearson correlation will determine if a significant relationship exists between the IV and the MV, whether a significant relationship exists between the MV and the DV and whether a significant relationship exists between the IV and the DV.</td>
</tr>
<tr>
<td>b) Is re-entry shock for first-year college students mediated by parents as facilitators of independence?</td>
<td>1 IV = First-year student</td>
<td>3 MV = Affective quality of relationships, parents as a source of support, parents as facilitators of independence</td>
<td>The Sobel Test using multiple regression determines if the affective quality of relationship between student and parent, parents who are a source of support and parents who facilitate independence in</td>
</tr>
</tbody>
</table>
Table 4 Cont.

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Variables</th>
<th>Statistical Analyses</th>
<th>Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ5 (cont.)</td>
<td></td>
<td></td>
<td>their students mediates first-year student re-entry shock.</td>
</tr>
</tbody>
</table>

Descriptive statistics were obtained to report the mean and the standard deviation of each of the independent variables of generation status, gender, and ethnicity and a reliability analysis was run to compute the alpha coefficient of the re-entry shock scale. Specifically, the researcher reported the aforementioned statistics for Black, male first-generation college students; White, male, first-generation college students; Hispanic, male, first-generation college students; Black, female, first-generation college students; White, female, first-generation college students; Hispanic, male, non-first-generation college students; Black, male, non-first-generation college students; White, male, non-first-generation college students; Hispanic, male, non-first-generation college students; Black, female, non-first-generation college students; White, female, non-first-generation college students; and Hispanic, female, non-first-generation college students.

To answer research questions 1, 1a, 1b, and 1c, a series of analysis of variances (ANOVAs) were conducted. The first ANOVA, a one-way analysis of variance, was used to compare the mean differences between first-generation and non-first generation college students in regard to re-entry shock. Two, two-way ANOVAs were then
conducted to examine the effect of generation status and gender and generation status and ethnicity on re-entry shock. Finally, a three-way ANOVA was attempted to test for significant mean differences in the interaction of generation status, gender, and ethnicity on re-entry shock.

For research questions 2, 2a, 2b, and 2c, a Pearson product-moment correlation was run to test the relationships of the dependent variables (affective quality of relationships, parents as facilitators of independence, and parents as a source of support). Because the dependent variables were moderately correlated (less than .80), a one-way multivariate analysis of variance (MANOVA) was conducted to determine mean differences between first-generation and non-first-generation college students while looking at parental attachment. A two-way MANOVA was then conducted to test the hypothesis that there would be significant mean differences among generation status and gender and the PAQ subscales (affective quality of relationships, parents as facilitators of independence, and parents as a source of support). Next, another two-way MANOVA was then conducted to test the hypothesis that there would be significant mean differences among generation status and ethnicity and the PAQ subscales. Finally, a three-way ANOVA was attempted to test for significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

For research questions 3, 4, 4a, and 4b, separate multiple linear regressions were used to predict the relationship among the independent variables of generation status,
gender, and ethnicity to re-entry shock, to the affective quality of relationships, to parents as a source of support, and to parents as facilitators of independence.

For research questions 5, 5a and 5b, Baron and Kenny’s (1986) approach to mediation was followed to determine if the PAQ subscales mediate a first-year student’s re-entry shock. First, using a Pearson correlation, it was determined whether a significant relationship existed between being a first-year student and each of the three mediating variables of parental attachment (affective quality of relationships, parents as facilitators of independence or parents as a source of support). Next, a determination was made regarding whether or not a significant relationship existed between the mediating variables of parental attachment (affective quality of relationships, parents as facilitators of independence or parents as a source of support) and the dependent variable re-entry shock (see Figure 2). Then it was determined if a significant relationship existed between the independent variable of first-year student with the dependent variable of re-entry shock. Because a significant relationship did not exist between the dependent and independent variable, the Sobel Test using the regression analysis was not needed to determine the significance of the mediation effect.
Parental Attachment
(affective quality of relationships; parents as facilitators of independence; parents as a source of support)

Generation Status
(first-generation; non-first-generation)

Re-entry Shock

Figure 2. Mediating Relationship.
CHAPTER IV

RESULTS

The purpose of this study was to determine whether first-year, first-generation college students experience more or less re-entry shock upon returning to their family culture after being away at college than first-year, non-first-generation college students. The role of parental attachment, specifically the affective quality of relationships, parents as facilitators of independence, and parents as facilitators of support also were examined as mediators for re-entry shock. Consideration was given to the roles of gender and ethnicity as independent variables.

Descriptive Statistics

The means and standard deviations were calculated for each of the independent variables of generation status, gender, and ethnicity (see Table 5). In addition, the means, standard deviations, and alpha coefficients were calculated for the re-entry shock scale, the parental attachment scale, and the three parental attachment subscales which include the affective quality of relationships subscale, parents as facilitators of independence subscale, and parents as a source of support subscale (see Table 6).
Table 5
Means, Standard Deviations, and Sample Sizes for Generation Status, Gender, and Ethnicity in Regard to Re-entry Shock

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (SD)</td>
<td>58.50 (6.36)</td>
<td>n/a</td>
<td>3.06</td>
<td>47.89 (9.47)</td>
<td>49.00 (7.07)</td>
<td>n/a</td>
</tr>
<tr>
<td>n</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>9</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Black (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic (SD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (SD)</td>
<td>54.53 (10.04)</td>
<td>48.00 (10.85)</td>
<td>52.50 (3.54)</td>
<td>50.61 (11.30)</td>
<td>51.98 (10.32)</td>
<td>54.29 (3.40)</td>
</tr>
<tr>
<td>n</td>
<td>15</td>
<td>8</td>
<td>2</td>
<td>69</td>
<td>44</td>
<td>7</td>
</tr>
</tbody>
</table>

Table 6
Means, Standard Deviations, and Alpha Coefficients for Scales and Subscales

<table>
<thead>
<tr>
<th>Scale</th>
<th>M</th>
<th>SD</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reentry Shock Scale (16 items)</td>
<td>51.06</td>
<td>10.88</td>
<td>.88</td>
</tr>
<tr>
<td>Parental Attachment Scale (55 items)</td>
<td>205.48</td>
<td>33.28</td>
<td>.95</td>
</tr>
<tr>
<td>Subscale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective Quality of Relationships (27 items)</td>
<td>108.05</td>
<td>18.14</td>
<td>.94</td>
</tr>
<tr>
<td>Parents as Facilitators of Independence (14 items)</td>
<td>50.79</td>
<td>9.61</td>
<td>.86</td>
</tr>
<tr>
<td>Parents as a Source of Support (13 items)</td>
<td>44.96</td>
<td>9.67</td>
<td>.86</td>
</tr>
</tbody>
</table>

Research Questions

Research Question 1: Is there a significant mean difference between generation statuses in regard to re-entry shock?
$H_0$: There is no significant mean difference between generation statuses in regard to re-entry shock.

$H_1$: There is a significant mean difference between generation statuses in regard to re-entry shock.

A one-way analysis of variance (ANOVA) was conducted to compare the mean differences between first-generation and non-first generation college students in regard to re-entry shock. Hypothesis One predicted that there would be a significant mean difference between generation statuses in regard to re-entry shock. The results of the ANOVA failed to support this prediction, $F(1, 176) = .479, p = .49$; therefore, the null hypothesis was accepted. A higher level of re-entry shock was reported in the first-generation college student condition ($M = 49.20, SD = 8.60$) than in the non-first-generation college student condition ($M = 51.23, SD = 11.07$), but the difference was not statistically significant (see Table 7). The low statistical power, .05, appears to be due to the extremely low effect size, $\eta^2 = .003$ (see Table 8).

Table 7

Means, Standard Deviations, and Sample Sizes for Generation Status and Re-entry Shock

<table>
<thead>
<tr>
<th></th>
<th>$M$</th>
<th>$SD$</th>
<th>$n$</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Generation</td>
<td>49.20</td>
<td>8.60</td>
<td>15</td>
</tr>
<tr>
<td>Non-First-Generation</td>
<td>51.23</td>
<td>11.07</td>
<td>163</td>
</tr>
</tbody>
</table>
Research question 1a: Are there significant mean differences among generation status and gender in regard to re-entry shock?

\( H_0: \) There are no significant mean differences among generation status and gender in regard to re-entry shock.

\( H_1: \) There are significant mean differences among generation status and gender in regard to re-entry shock.

A two-way ANOVA was conducted to examine the effect of generation status and gender on re-entry shock. The ANOVA results revealed that there was no statistically significant mean difference between the effects of generation status and gender on re-entry shock, \( F(1, 172) = .678, p = .41 \). The highest level of re-entry shock was reported in the first-generation female college student group (\( M = 47.67, SD = 8.49 \)), followed by the non-first-generation female college student group (\( M = 51.23, SD = 10.74 \)), the non-first-generation male college student group (\( M = 53, SD = 10.76 \)), and finally the first-generation male college student group (\( M = 55.33, SD = 7.10 \)) (see Table 9). The low
statistical power $1-\beta = .05$ is most likely the result of the small mean differences between the groups and the extremely small effect size, $\eta^2 = .03$.

Table 9
Means, Standard Deviations, and Sample Sizes for Generation Status, Gender, and Re-entry Shock

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>First-Generation</td>
<td>55.33</td>
<td>7.10</td>
</tr>
<tr>
<td>Non-First-Generation</td>
<td>53.00</td>
<td>10.76</td>
</tr>
</tbody>
</table>

Table 10
Two-Way Analysis of Variance between the Effects of Generation Status and Gender on Re-entry Shock

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>$df$</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>3.30</td>
<td>1</td>
<td>3.30</td>
<td>.03</td>
<td>.86</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Gender</td>
<td>194.63</td>
<td>1</td>
<td>194.63</td>
<td>1.74</td>
<td>.19</td>
<td>.01</td>
<td>.26</td>
</tr>
<tr>
<td>Interaction</td>
<td>75.95</td>
<td>1</td>
<td>75.95</td>
<td>.68</td>
<td>.41</td>
<td>.00</td>
<td>.13</td>
</tr>
<tr>
<td>Error</td>
<td>19254.46</td>
<td>172</td>
<td>111.95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19548.45</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Research question 1b: Are there significant mean differences among generation status and ethnicity in regard to re-entry shock?

H0: There are no significant mean differences among generation status and ethnicity in regard to re-entry shock.

H1: There are significant mean differences among generation status and ethnicity in regard to re-entry shock.

To evaluate the effect of generation status and ethnicity on re-entry shock, a two-way ANOVA was conducted. The results of the ANOVA indicated that there is no statistical significance between the effects of generation status and ethnicity on the dependent variable of re-entry shock, $F(2, 155) = .065, p = .94$. Therefore, the results of the ANOVA failed to support the prediction of Hypothesis One. See Table 11.

Table 11

Two-Way Analysis of Variance between the Effects of Generation Status and Ethnicity on Re-entry Shock

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>38.18</td>
<td>1</td>
<td>38.18</td>
<td>.32</td>
<td>.57</td>
<td>.00</td>
<td>.09</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>4.84</td>
<td>2</td>
<td>2.42</td>
<td>.02</td>
<td>.98</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Interaction</td>
<td>15.39</td>
<td>2</td>
<td>7.70</td>
<td>.07</td>
<td>.94</td>
<td>.00</td>
<td>.06</td>
</tr>
<tr>
<td>Error</td>
<td>18240.72</td>
<td>155</td>
<td>117.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18358.00</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The descriptive statistics show that first-generation college students do experience higher levels of re-entry shock more often than non-first-generation college students no matter what their ethnicity is (see Table 12). However, these differences are not statistically significant. Again, it should be noted that there was low statistical power and small effect size ($1-\beta = .08; \eta^2 = .04$).

Table 12

Means, Standard Deviations, and Sample Sizes for Generation Status, Ethnicity, and Re-entry Shock

<table>
<thead>
<tr>
<th>Generation Status</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
<td>$M (SD)$</td>
</tr>
<tr>
<td></td>
<td>$n$</td>
<td>$n$</td>
<td>$n$</td>
</tr>
<tr>
<td>First-Generation</td>
<td>49.82 (9.70)</td>
<td>49.00 (7.07)</td>
<td>49.00 (0)</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Non-First-Generation</td>
<td>50.70 (11.71)</td>
<td>51.37 (10.39)</td>
<td>53.89 (3.30)</td>
</tr>
<tr>
<td></td>
<td>86</td>
<td>52</td>
<td>9</td>
</tr>
</tbody>
</table>

Research question 1c: Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regard to re-entry shock?

$H_0$: There are no significant mean differences in the interaction of generation status, gender, and ethnicity in regard to re-entry shock.

$H_1$: There are significant mean differences in the interaction of generation status, gender, and ethnicity in regard to re-entry shock.
A three-way ANOVA could not be performed because some of the groups were without participants; therefore, the degrees of freedom for the interaction of the three independent variables was zero and, as a result, could not be calculated.

Research question 2: Are there significant mean differences between first-generation and non-first-generation status in regard the affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

\[ H_0: \text{There are no mean differences between first-generation and non-first-generation status in regard the affective quality of relationships, parents as facilitators of independence, and parents as a source of support.} \]

\[ H_1: \text{There are significant mean differences between first-generation and non-first-generation status in regard the affective quality of relationships, parents as facilitators of independence, and parents as a source of support.} \]

Prior to conducting a MANOVA to compare mean differences, a Pearson product-moment correlation was run to determine the relationships of the three dependent variables which included parents as a source of support, parents as facilitators of independence, and affective quality of relationships. The dependent variables affective quality of relationships and parents as facilitators of independence were positively correlated at a statistically significant level ($r = .748, n = 178, p < .01$). The Pearson correlation also determined that a positive correlation existed between parents as a source of support and affective quality of relationships at a statistically significant level ($r = .701, n = 178, p < .01$). Finally, although a positive correlation also existed between parents as facilitators of independence and parents as a source of support at a statistically
significant level \( (r = .472, n = 178, p < .01) \), it was not as strong of a relationship as the relationships between affective quality of relationships and parents as facilitators of independence or the correlation between parents as a source of support and affective quality of relationships (see Table 13).

Table 13

Pearson Correlations between Affective Quality of Relationships, Parents as Facilitators of Independence, and Parents as a Source of Support

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Affective Quality of Relationships</td>
<td>.75***</td>
<td></td>
<td>.70**</td>
</tr>
<tr>
<td>2. Facilitators of Independence</td>
<td></td>
<td>.47**</td>
<td></td>
</tr>
<tr>
<td>3. Source of Support</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. \( N=178; \ **p < .01.\)

Because all of the dependent variables were moderately correlated, a one-way MANOVA was run to determine if significant mean differences existed between first-generation and non-first-generation college students in regard to the affective quality of relationships, parents as facilitators of independence, and parents as a source of support (see Table 14). The MANOVA revealed that generation status had no statistically significant effect on the multivariate interaction, \( F(3, 174) = 2.53, p = .06; \) Wilks's \( \Lambda = .96, \) partial \( \eta^2 = .04; \) however, the results of the univariate ANOVA indicated that generation status does have a statistically significant effect on the affective quality of relationships, \( F(1, 176) = 7.50, p < .01; \) partial \( \eta^2 = .04 \) with an observed power of .77.
and on parents as a source of support, $F(1, 176) = 4.77, p < .05$; partial $\eta^2 = .03$ with and observed power of .58 (see Table 15).

Table 14

Multivariate Tests for the Effect of Generation Status on the PAQ Subscales

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilks’s $A$</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>.96</td>
<td>2.53</td>
<td>3.00</td>
<td>174.00</td>
<td>.06</td>
<td>.04</td>
<td>.62</td>
</tr>
</tbody>
</table>

Table 15

One-Way Multivariate Analysis of Variance between the Effects of Generation Status on the PAQ Subscales

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Sum of Squares</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>Relationship</td>
<td>2378.69</td>
<td>2378.69</td>
<td>7.50</td>
<td>.01</td>
<td>.04</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>325.66</td>
<td>325.66</td>
<td>3.58</td>
<td>.06</td>
<td>.02</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>436.25</td>
<td>436.25</td>
<td>4.77</td>
<td>.03</td>
<td>.03</td>
<td>.58</td>
</tr>
<tr>
<td>Error</td>
<td>Relationship</td>
<td>55853.85</td>
<td>317.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>16003.65</td>
<td>90.93</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>16104.47</td>
<td>91.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Relationship</td>
<td>58232.55</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>16329.31</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>16540.73</td>
<td>177</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Non-first-generation college students feel that the affective quality of relationships with their parents is stronger \( (M = 109.16) \) than first-generation college students \( (M = 96.00) \) at a statistically significant level \( (p < .01) \). In addition, first-generation college students generally feel less supported by their parents \( (M = 39.8) \) than non-first generation college students \( (M = 45.44) \) at a statistically significant level \( (p < .05) \). See Table 16. The observed power for the multivariate MANOVA was .62 (see Table 14); leaving a 38% probability of making a Type II error. One way to decrease the probability of Type II error would be to increase the sample size.

Table 16

Means, Standard Deviations, and Sample Sizes for Generation Status and PAQ Subscales

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Generation Status</th>
<th>( M )</th>
<th>( SD )</th>
<th>( n )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Quality of Relationship</td>
<td></td>
<td>Non-first-gen</td>
<td>109.16</td>
<td>17.86</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-gen</td>
<td>96.00</td>
<td>17.33</td>
<td>15</td>
</tr>
<tr>
<td>Facilitators of Independence</td>
<td></td>
<td>Non-first-gen</td>
<td>51.20</td>
<td>9.46</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-gen</td>
<td>46.33</td>
<td>10.41</td>
<td>15</td>
</tr>
<tr>
<td>Source of Support</td>
<td></td>
<td>Non-first-gen</td>
<td>45.44</td>
<td>9.69</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-gen</td>
<td>39.80</td>
<td>7.95</td>
<td>15</td>
</tr>
</tbody>
</table>

Research question 2a: Are there significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?
\(H_0:\) There are no significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

\(H_1:\) There are significant mean differences among generation status and gender in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

A two-way MANOVA was conducted to test the hypothesis that there would be significant mean differences among generation status and gender and the PAQ subscales (affective quality of relationships, parents as facilitators of independence, and parents as a source of support). The MANOVA results revealed a statistically significant multivariate main effect for gender, \(F(3, 170) = 3.24, p < .05; \text{Wilks’s } \Lambda = .95, \text{partial } \eta^2 = .01\) (see Table 17). The univariate ANOVA results showed gender has a statistically significant effect on both the affective quality of relationships, \(F(1, 172) = 5.31, p < .05; \text{partial } \eta^2 = .03\) and parents as facilitators of independence, \(F(1, 172) = 6.79, p < .05; \text{partial } \eta^2 = .04\) (see Table 18).

Table 17
Multivariate Tests for the Effect of Generation Status and Gender on the PAQ Subscales

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilks’s (\Lambda)</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>.99</td>
<td>.46</td>
<td>3.00</td>
<td>170.00</td>
<td>.71</td>
<td>.01</td>
<td>.14</td>
</tr>
<tr>
<td>Gender</td>
<td>.95</td>
<td>3.24</td>
<td>3.00</td>
<td>170.00</td>
<td>.02</td>
<td>.05</td>
<td>.74</td>
</tr>
<tr>
<td>Interaction</td>
<td>.97</td>
<td>1.95</td>
<td>3.00</td>
<td>170.00</td>
<td>.12</td>
<td>.03</td>
<td>.50</td>
</tr>
</tbody>
</table>
Table 18

Two-Way Multivariate Analysis of Variance between the Effect of Generation Status and Gender on the PAQ Subscales

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial $\eta^2$</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>Relationship</td>
<td>253.42</td>
<td>1</td>
<td>253.42</td>
<td>.84</td>
<td>.36</td>
<td>.01</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>44.57</td>
<td>1</td>
<td>44.57</td>
<td>.52</td>
<td>.47</td>
<td>.00</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>119.77</td>
<td>1</td>
<td>119.77</td>
<td>1.34</td>
<td>.25</td>
<td>.01</td>
<td>.21</td>
</tr>
<tr>
<td>Gender</td>
<td>Relationship</td>
<td>1600.57</td>
<td>1</td>
<td>1600.57</td>
<td>5.31</td>
<td>.02</td>
<td>.03</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>586.56</td>
<td>1</td>
<td>586.56</td>
<td>6.79</td>
<td>.01</td>
<td>.04</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>8.42</td>
<td>1</td>
<td>8.42</td>
<td>.09</td>
<td>.76</td>
<td>.00</td>
<td>.06</td>
</tr>
<tr>
<td>Interaction</td>
<td>Relationship</td>
<td>1605.09</td>
<td>1</td>
<td>1605.09</td>
<td>5.32</td>
<td>.02</td>
<td>.03</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>195.12</td>
<td>1</td>
<td>195.11</td>
<td>2.26</td>
<td>.14</td>
<td>.01</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>103.14</td>
<td>1</td>
<td>103.14</td>
<td>1.15</td>
<td>.29</td>
<td>.01</td>
<td>.19</td>
</tr>
<tr>
<td>Error</td>
<td>Relationship</td>
<td>51885.79</td>
<td>172</td>
<td>301.66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>14851.37</td>
<td>172</td>
<td>86.35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>15427.41</td>
<td>172</td>
<td>89.69</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Relationship</td>
<td>56152.73</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>15894.54</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>16082.16</td>
<td>175</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Post-hoc tests indicated that male students perceive their relationships with their parents to be stronger ($M = 113.58$) than female students ($M = 100.51$) and first-year male students feel that their parents are generally more supportive of their decisions and judgment ($M = 55.43$) than first-year, female students ($M = 47.24$) at a statistically
significant level \((p < .05)\). Although no statistically significant interaction between
generation status and gender was found in regard to parental attachment, \(F(3, 170) = 1.95, p = .12\); *Wilks’s \(\Lambda = .97\), partial \(\eta^2 = .03\) for the multivariate interaction, the
univariate ANOVA indicated generation status and gender has a statistically significant
effect on the affective quality of relationships, \(F(1, 172) = 5.32, p < .05\); partial \(\eta^2 = .03\).
Power to detect the main effect was .50, leaving a 50% probability of making a Type II
error.

Table 19

Means, Standard Deviations and Sample Sizes for the PAQ Subscales, Generation Status, and Gender

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Gender</th>
<th>(M)</th>
<th>(SD)</th>
<th>(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Quality of Relationship</td>
<td>Generation Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-first-generation</td>
<td>Male</td>
<td>109.50</td>
<td>14.43</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>109.52</td>
<td>18.27</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td>First-generation</td>
<td>Male</td>
<td>117.67</td>
<td>12.42</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>90.58</td>
<td>13.94</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Facilitators of Independence</td>
<td>Generation Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-first-generation</td>
<td>Male</td>
<td>54.20</td>
<td>7.65</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>50.73</td>
<td>9.62</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td>First-generation</td>
<td>Male</td>
<td>56.67</td>
<td>8.62</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>43.75</td>
<td>9.38</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Source of Support</td>
<td>Generation Status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-first-generation</td>
<td>Male</td>
<td>43.60</td>
<td>8.69</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>46.05</td>
<td>9.77</td>
<td>131</td>
<td></td>
</tr>
<tr>
<td>First-generation</td>
<td>Male</td>
<td>43.33</td>
<td>7.51</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>38.92</td>
<td>8.12</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>
Research question 2b: Are there significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

H0: There are no significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

H1: There are significant mean differences among generation status and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

A second two-way MANOVA was used to evaluate parental attachment differences between generation status and ethnicity. Affective quality of relationships, parents as facilitators of independence, and parents as a source of support served as the dependent variables. Although significant mean differences were not found in the multivariate results among generation status and ethnicity in regard to parental attachment, $F(6, 306) = .51, p = .80$; Wilks’s $\Lambda = .98$, partial $\eta^2 = .01$, see Table 20), the MANOVA results revealed generation status as a significant univariate main effect for affective quality of relationships, $F(1, 155) = 5.53, p < .05$; partial $\eta^2 = .03$; see Table 21). Non-first-generation college students feel as if their relationships with their parents are stronger ($M = 111.09$) than first-generation college students ($M = 94.53$) at a statistically significant level ($p < .05$). See Table 22. In addition to the small effect size, the overall observed power was also very low at .21.
Table 20
Multivariate Tests for the Effect of Generation Status and Ethnicity on the PAQ Subscales

<table>
<thead>
<tr>
<th>Effect</th>
<th>Wilks’s $A$</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>.97</td>
<td>1.62</td>
<td>3.00</td>
<td>153.00</td>
<td>.19</td>
<td>.03</td>
<td>.42</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.95</td>
<td>1.44</td>
<td>6.00</td>
<td>306.00</td>
<td>.20</td>
<td>.03</td>
<td>.56</td>
</tr>
<tr>
<td>Interaction</td>
<td>.98</td>
<td>.51</td>
<td>6.00</td>
<td>306.00</td>
<td>.80</td>
<td>.01</td>
<td>.21</td>
</tr>
</tbody>
</table>

Table 21
Two-Way Multivariate Analysis of Variance between the Effect of Generation Status and Ethnicity on the PAQ Subscales

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial $\eta^2$</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Status</td>
<td>Relationship</td>
<td>1423.97</td>
<td>1</td>
<td>1423.97</td>
<td>4.53</td>
<td>.04</td>
<td>.03</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>190.67</td>
<td>1</td>
<td>190.67</td>
<td>2.09</td>
<td>.15</td>
<td>.01</td>
<td>.30</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>116.74</td>
<td>1</td>
<td>116.74</td>
<td>1.23</td>
<td>.27</td>
<td>.01</td>
<td>.20</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Relationship</td>
<td>1639.74</td>
<td>2</td>
<td>819.87</td>
<td>2.61</td>
<td>.08</td>
<td>.03</td>
<td>.51</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>279.12</td>
<td>2</td>
<td>139.56</td>
<td>1.53</td>
<td>.22</td>
<td>.02</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>32.77</td>
<td>2</td>
<td>16.38</td>
<td>.17</td>
<td>.84</td>
<td>.00</td>
<td>.08</td>
</tr>
<tr>
<td>Interaction</td>
<td>Relationship</td>
<td>780.25</td>
<td>2</td>
<td>390.12</td>
<td>1.24</td>
<td>.29</td>
<td>.02</td>
<td>.27</td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>94.05</td>
<td>2</td>
<td>47.02</td>
<td>.52</td>
<td>.60</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>54.27</td>
<td>2</td>
<td>27.14</td>
<td>.29</td>
<td>.75</td>
<td>.00</td>
<td>.10</td>
</tr>
<tr>
<td>Error</td>
<td>Relationship</td>
<td>48745.30</td>
<td>155</td>
<td>314.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>14148.90</td>
<td>155</td>
<td>91.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>14725.72</td>
<td>155</td>
<td>95.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Relationship</td>
<td>52980.35</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Independence</td>
<td>14807.80</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>15139.99</td>
<td>160</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 22
Means, Standard Deviations, and Sample Sizes for Generation Status and Ethnicity

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variables</th>
<th>Generation Status</th>
<th>Ethnicity</th>
<th>M</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective Quality of Relationship</td>
<td></td>
<td>Non-first-generation</td>
<td>White</td>
<td>110.45</td>
<td>17.70</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>106.92</td>
<td>18.62</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>115.89</td>
<td>13.54</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-generation</td>
<td>White</td>
<td>99.09</td>
<td>12.42</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>74.50</td>
<td>13.94</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>110.00</td>
<td>.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Facilitators of Independence</td>
<td></td>
<td>Non-first-generation</td>
<td>White</td>
<td>52.52</td>
<td>9.76</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>49.75</td>
<td>9.49</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>52.22</td>
<td>6.51</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-generation</td>
<td>White</td>
<td>48.81</td>
<td>9.66</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>38.50</td>
<td>13.43</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>49.00</td>
<td>.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Source of Support</td>
<td></td>
<td>Non-first-generation</td>
<td>White</td>
<td>45.70</td>
<td>9.63</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>45.69</td>
<td>9.66</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>43.33</td>
<td>11.39</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>First-generation</td>
<td>White</td>
<td>41.00</td>
<td>8.46</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Black</td>
<td>36.50</td>
<td>4.95</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hispanic</td>
<td>40.50</td>
<td>.</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Research question 2c: Are there significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support?

H0: There are no significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.
H0: There are significant mean differences in the interaction of generation status, gender, and ethnicity in regard to affective quality of relationships, parents as facilitators of independence, and parents as a source of support.

A three-way ANOVA could not be performed because some of the groups were without participants; therefore, the degrees of freedom for the interaction of the three independent variables was zero and, as a result, could not be calculated.

Research question 3: To what extent, if any, do generation status, gender and ethnicity predict re-entry shock of first-year students?

H0: Generation status, gender and ethnicity do not predict re-entry shock of first-year students.

H1: Generation status, gender and ethnicity do predict re-entry shock of first-year students.

A step-wise multiple regression model was used to examine whether the independent variables predict whether students perceive their parents as a source of support; however, none of the independent variables entered the model to account for a sufficient portion of the variance of the dependent variable. In response, an enter multiple regression analysis was conducted. The mean score for re-entry shock was 51.33 with a standard deviation of 10.36. The multiple regression model with all three predictors, generation status, gender, and ethnicity, produced $R^2 = .01$, $F(3, 155) = .369$, $p = .78$. The value of the correlation coefficient ($R$) is .08, indicating a small degree of correlation. Tolerance and the Variance Inflation Factors (VIF) were examined to determine if the data met the assumption of collinearity. To avoid multicollinearity, a
lower VIF is desired, usually between 1 and 10 (Howell, 2010). The tests indicated that multicollinearity was not a concern (generation status, Tolerance = .991, VIF = 1.010; gender, Tolerance = .998, VIF = 1.002; ethnicity, Tolerance = .991, VIF = 1.009). Therefore, generation status, gender, and ethnicity do not predict re-entry shock of first-year students. Only 1% of the variation in re-entry shock can be explained by gender, ethnicity, and generation status. A linear relationship does not exist among the variables. Statistical power for this analysis was calculated at .16.

Table 23

Regression Model Summary for Predictors of Re-entry Shock

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.08</td>
<td>.01</td>
<td>-.01</td>
<td>10.43</td>
</tr>
</tbody>
</table>

*Note. Predictors: (Constant), Generation Status*

Table 24

Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Re-entry Shock

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>53.55</td>
<td>4.59</td>
<td>-</td>
<td>11.68</td>
<td>.00</td>
</tr>
<tr>
<td>Generation Status</td>
<td>-1.80</td>
<td>2.93</td>
<td>-.05</td>
<td>-.62</td>
<td>.54</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.55</td>
<td>1.36</td>
<td>.03</td>
<td>.41</td>
<td>.69</td>
</tr>
<tr>
<td>Gender</td>
<td>-1.57</td>
<td>2.17</td>
<td>-.06</td>
<td>-.72</td>
<td>.47</td>
</tr>
</tbody>
</table>

*Note. Reentry Shock = -1.80 (generation status) + .55 (ethnicity) -1.57 (gender) + 53.55*
Research question 4: To what extent, if any, do generation status, gender and ethnicity predict the affective quality of relationships?

H0: Generation status, gender and ethnicity do not predict the affective quality of relationships.

H1: Generation status, gender and ethnicity do predict the affective quality of relationships.

A step-wise multiple regression analysis was conducted to predict the affective quality of relationships between students and their parents based on generation status, gender, and ethnicity. The mean for affective quality of relationships was 108.74 with a standard deviation of 17.94. A significant regression equation was found ($F(1, 157) = 7.62, p = .006, R^2 = .046$). See Table 25. With more participants and higher power, future results could indicate statistical significance. Generation status was a significant predictor ($p < .01$) but ethnicity ($p = .63$) and gender ($p = .71$) were not significant. Therefore, a first-generation college student’s quality of relationship with his or her parents is 13.58 units lower than that of a non-first-generation college student of the same ethnicity and gender (see Table 26). From this analysis, it can be concluded that generation status makes a significant, unique contribution to the prediction of the outcome for the perceived quality of relationship between a student and one’s parents. It has also been determined that the independent variables account for only about 5% of the variance in the affective quality of relationships score. Statistical power ($1-\beta = .63$) was calculated using G-Power. Based on the calculations, a 37% possibility of a Type II error exists.
Table 25
Regression Model Summary for Predictors of Affective Quality of Relationships

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>( R^2 )</th>
<th>Adjusted ( R^2 )</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.22</td>
<td>.05</td>
<td>.04</td>
<td>17.58</td>
</tr>
</tbody>
</table>

Note. Predictors: (Constant), Generation Status

Table 26
Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Affective Quality of Relationships

<table>
<thead>
<tr>
<th>Model</th>
<th>( B )</th>
<th>SE</th>
<th>( \beta )</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>109.94</td>
<td>1.46</td>
<td>-</td>
<td>75.32</td>
<td>.00</td>
</tr>
<tr>
<td>Generation Status</td>
<td>-13.58</td>
<td>4.92</td>
<td>-.22</td>
<td>-2.79</td>
<td>.01</td>
</tr>
</tbody>
</table>

Note. Affective Quality of Relationships = -13.58 (generation status) + 109.94

Research question 4a: To what extent, if any, do generation status, gender and ethnicity predict parents as a source of support?

\( H_0: \) Generation status, gender and ethnicity do not predict parents as a source of support.

\( H_1: \) Generation status, gender, and ethnicity do predict parents as a source of support.

Initially, a step-wise multiple regression model was used to examine whether the independent variables predict whether students perceive their parents as a source of support; however, none of the independent variables accounted for a sufficient portion of the variance of the dependent variable to enter the equation; therefore, an enter multiple regression analysis was conducted. The multiple regression model provided no evidence
to support that generation status, gender, and ethnicity predict parents as a source of support \((R^2 = .032, F(3, 155) = 1.73, p = .163)\). See Table 27.

Table 27

Regression Model Summary for Predictors of Parents as a Source of Support

<table>
<thead>
<tr>
<th>Model</th>
<th>(R)</th>
<th>(R^2)</th>
<th>Adjusted (R^2)</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.18</td>
<td>.03</td>
<td>.01</td>
<td>9.57</td>
</tr>
</tbody>
</table>

*Note.* Predictors: (Constant), Generation Status

Only 3% of the variation in parents as a source of support for first-year students can be explained by gender, ethnicity, and generation status. Tolerance and VIF were examined to determine if the data met the assumption of collinearity. Again, a low VIF between 1 and 10 was desired to avoid multicollinearity (Howell, 2010). The tests indicated that multicollinearity was not a concern (generation status, Tolerance = .991, VIF = 1.010; gender, Tolerance = .998, VIF = 1.002; ethnicity, Tolerance = .991, VIF = 1.009). A linear relationship does not exist among the variables. The statistical power of the analysis was determined by running a post-hoc test in G-Power which resulted in \(1-\beta = .46\).
Table 28

Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Parents as a Source of Support

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>SE</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>43.32</td>
<td>4.21</td>
<td>-</td>
<td>10.29</td>
<td>.00</td>
</tr>
<tr>
<td>Generation Status</td>
<td>-5.30</td>
<td>2.69</td>
<td>-.16</td>
<td>-1.97</td>
<td>.05</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-0.78</td>
<td>1.25</td>
<td>-.05</td>
<td>-0.63</td>
<td>.53</td>
</tr>
<tr>
<td>Gender</td>
<td>1.95</td>
<td>1.99</td>
<td>.08</td>
<td>.98</td>
<td>.33</td>
</tr>
</tbody>
</table>

*Note.* Source of Support = -5.30 (generation status) - .78 (ethnicity) + 1.95 (gender) + 43.32

Research question 4b: To what extent, if any, do generation status, gender and ethnicity predict parents as facilitators of independence?

$H_0$: Generation status, gender and ethnicity do not predict parents as facilitators of independence.

$H_1$: Generation status, gender and ethnicity do predict parents as facilitators of independence.

A final step-wise multiple regression analysis was calculated to predict whether or not first-year students perceive their parents as facilitators of independence based on generation status, gender, and ethnicity. A significant regression equation was found, $F(1, 157) = 4.07, p = .045,$ with an $R^2$ of .025 (see Table 29). Gender was a negatively significant predictor ($p < .05$) but ethnicity ($p = .17$) and generation status ($p = .09$) were not significant. Therefore, a female college student’s perception that her parents are encouraging of her decision making and are generally accepting of the female student’s judgment is 3.97 units lower than the perceptions of a male student of the same ethnicity.
and generation status (see Table 30). It was also determined that gender accounts for 3% of the variance in parents being perceived as facilitators of independence. Statistical power was calculated at $1 - \beta = .36$, which is low and could be increased by an escalation of the sample size.

Table 29
Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.16</td>
<td>.03</td>
<td>.02</td>
<td>9.44</td>
</tr>
</tbody>
</table>

*Note.* Predictors: (Constant), Gender

Table 30
Multiple Regression Analysis Testing Generation Status, Gender, and Ethnicity on Parents as Facilitators of Independence

<table>
<thead>
<tr>
<th>Model</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>58.57</td>
<td>3.66</td>
<td>-</td>
<td>16.00</td>
<td>.00</td>
</tr>
<tr>
<td>Gender</td>
<td>-3.97</td>
<td>1.97</td>
<td>-.16</td>
<td>-2.02</td>
<td>.05</td>
</tr>
</tbody>
</table>

*Note.* Facilitators of Independence $= -3.97$ (generation status) + 58.57

*Research question 5:* Is re-entry shock for first-year college students mediated by the affective quality of relationships?

$H_0$: Re-entry shock is not mediated by the affective quality of relationships.

$H_1$: Re-entry shock is mediated by the affective quality of relationships.
Using Baron and Kenny’s (1986) approach to mediation, the mediating relationship of the affective quality of relationships on re-entry shock for first-year students was examined. First, a Pearson correlation was run to determine if significant relationships exist between the independent variable of generation status and the mediating variable of affective quality of relationships. The correlation table indicated that a significant relationship did exist between the two variables \((p < .01)\) (see Figure 3).

Figure 3. Mediating Relationship for Affective Quality of Relationships on Re-entry. Shock Correlations marked with ** are significant at the .01 level.

The next step was to determine if a significant relationship exists between the mediating variable of affective quality of relationships with the dependent variable of re-entry shock. The correlation table indicated that a significant relationship did exist \((p < \)
.01). Finally, according to Baron and Kenny (1986), before examining the mediating relationship through a regression analysis, there must be a significant relationship between the independent variable and the dependent variable. According to the correlation table, a significant relationship between the independent and dependent variable did not exist ($p = .49$). Therefore, because the criteria for mediation was not met, it was not necessary to run the regression analysis to test for mediation.

**Research question 5a: Is re-entry shock for first-year college students mediated by parents as a source of support?**

*H₀*: Re-entry shock is not mediated by parents as a source of support.

*H₁*: Re-entry shock is mediated by parents as a source of support.

Again, using Baron and Kenny’s (1986) approach to mediation, the mediating relationship of the affective quality of relationships on re-entry shock for first-year students was examined. First, a correlation was run to determine if a significant relationship exists between the independent variable of generation status and the mediating variable of parents as a source of support. The correlation table indicated that a significant relationship did exist between the two variables ($p = .03$; see Figure 4). To continue testing for the criteria for mediation, the next step was to determine if a significant relationship exists between the mediating variable of parents as a source of support with the dependent variable of re-entry shock. The correlation table indicated the relationship between these two variables was not significant ($p = .09$). A significant relationship also failed to exist between the independent variable and the dependent
variable, \((p = .49)\). Therefore, because the criteria for mediation was not met, it was not necessary to run the regression analysis to test for mediation.

Figure 4. Mediating Relationship for Parents as a Source of Support on Re-entry Shock.

Correlations marked with * are significant at the .05 level.

Research question 5b: Is re-entry shock for first-year college students mediated by parents as facilitators of independence?

\[ H_0: \text{Re-entry shock is not mediated by parents as facilitators of independence.} \]

\[ H_1: \text{Re-entry shock is mediated by parents as facilitators of independence.} \]

Lastly, research question 5b was analyzed for the mediating criteria as explained by Baron and Kenny (1986). When examined for a significant relationship between the independent variable of generation status and the mediating variable of parents as
facilitators of independence, the Pearson correlation matrix indicated a non-significant relationship ($p = .06$; see Figure 5). Next, the correlation showed that the mediating variable of parents as facilitators of independence and the dependent variable of re-entry shock did have a significant relationship ($p < .01$). But again, the relationship between the independent variable of generation status and dependent variable of re-entry shock was not significant ($p = .49$). Therefore, because the criteria for mediation was not met, it was not necessary to run the regression analysis to test for mediation.

Figure 5. Mediating Relationship for Parents as Facilitators of Independence on Re-entry Shock. Correlations marked with ** are significant at the .01 level.
CHAPTER V
DISCUSSION

Introduction

College student transition has long been a topic of interest for higher education scholars. Much research has occurred on the topics of first-year transition (Heister et al., 2009; Kenny & Donaldson, 1991; Manhattan et al., 2004; ), first-generation college student transition (Alessandria & Nelson, 2005; Brown & Burkhardt, 1999; Bui, 2002; Byrd & MacDonald, 2005; Choy, 2001; Grant-Vallone et al., 2004; Green, 2006; Hahs-Vaughn, 2004; Inkelas et al., 2006; Murphy & Hicks, 2006; Owens et al., 2010; Pascarella et al., 2003; Smith, 2008; Tierney & Venegas, 2009), transition for students studying abroad (Adler, 1975; Searle & Ward, 1990; Zhou et al., 2008), and transition for students returning to their home country after studying abroad (Adler, 1981; Gaw, 2000; Gullahorn & Gullahorn, 1963; Huff, 2001; Martin, 1986; Nash 1976; Rogers & Ward, 1993; Sussman, 2001). In addition to these transition issues, much is known about parental attachment and its impact on college students due to the work done by those such as Coburn (2006), Kenny (1994), Kenny and Rice (1995), Lapsley et al. (1990), and Taub (2008). Family dynamics and the role of family on student success also have been studied (Hannum & Dvorak, 2004; Schultheiss & Blustein, 1994). However, with all of the research on college student adjustment and parental attachment, little research exists regarding the impact on students returning to their family culture after being away at
college (Davis, 2010; London, 1992), specifically for first-generation college students, and the role of parental attachment in mediating re-entry shock.

First-generation college students are returning to family cultures that have little or no understanding what it is like to study at the university level. After reading and analyzing 14 narratives written by first-generation college students at Sonoma State University, Davis (2010) developed a list of recommendations for colleges and universities to take into consideration in order to provide the necessary support for first-generation college students. One of those recommendations was “First-generation college students need help in advancing their personal relationships with family members and friends from their home culture” (p. 199). Davis (2010) determined this need from student narratives about their family culture such as the one written by John Hunter stating, “Each time I visit home, I am reminded I do not fully understand their world and they do not fully identify with mine” (p. 200). Statements such as this show a need to fill in the gap in the literature to better understand the needs of first-generation college students returning to their home cultures.

The researcher for the current study examined this gap by investigating whether or not first-year students experience re-entry shock when returning to their family culture after spending time at college. Specifically, non-first-generation and first-generation college students were surveyed to determine if significant mean differences exist between these two groups of first-year students in regard to re-entry shock. Relationships between students and their parents were also studied. The affective quality of relationships (student perceptions that their parents are available, understanding, and accepting),
parents as facilitators of independence (whether students believe that they have parental encouragement and understanding regarding decision making and judgment), and parents as a source of support (the student’s level of satisfaction regarding parental support) also were examined as mediators of re-entry shock. Finally, differences between gender and differences among ethnic groups also were considered as independent variables in the study.

Findings

Re-entry Shock

Research questions 1, 1a, 1b, 1c, and 3 sought to determine mean differences between the re-entry shock experiences of first-year college students based on generation status, gender, and ethnicity and to determine which of the independent variables predict re-entry shock. Often, students returning to their home culture after being in a new, foreign culture experience feelings of isolation, anxiety, alienation, and disconnectedness, as others may not relate to their experiences if they have not had the opportunity or background to become familiar with those experiences (Adler, 1981; Gaw, 2000; Nash, 1976; Rogers & Ward, 1993). This phenomenon, known as re-entry shock, can have negative psychological effects on the individuals experiencing this let down. However, based on the results of the current study, first-year students do not experience significant differences in re-entry shock based on their generation status, gender, or ethnicity. These results are different from those of Wielkiewicz and Turkowski (2010) who used comparison groups and found that there was a significant difference in Reentry Shock Scale (RSS) scores between students who studied abroad and students who did not which
was attributed to an increased skepticism of their home culture from the study abroad group.

The mean RSS score for the current sample was 3.19 with a standard deviation of .68. Seiter and Waddell (1989) reported a mean RSS score of 4.4 with a standard deviation of .96 and Gaw (2000) reported a mean RSS score of 4.8 and a standard deviation of .82. Therefore, the current study revealed a lower level of re-entry shock than previous studies and less variation in the responses. Differences in scores may be due to the length of time that students were away from their home cultures. For instance, the participants in Seiter and Waddell’s (1989) study were abroad for an average of about one year, whereas Gaw’s (2000) participants lived abroad for an average of ten years. It is possible that a longer length away from home may be associated with higher re-entry shock scores. Although students may experience levels of re-entry shock and may need some psychological preparation for their return back to their family cultures, results from the current study indicate that preparation may not need to be individualized based on the studied characteristics. However, it also is possible that given the small sample size, especially among the first-generation college student group, the analysis lacked sufficient power to determine whether significant differences actually existed. Repeating the study with a larger sample could reveal significant differences.

Although the highest level of re-entry shock was reported in the first-generation female college student group, followed by the non-first-generation college female student group, then the non-first-generation male college student group, and finally the first-generation male college student group, the differences were not statistically significant.
Parental Attachment

Research questions 2, 2a, 2b, and 2c sought to determine mean differences between the elements of parental attachment of first-year college students based on generation status, gender, and ethnicity. Research questions 4, 4a, and 4b examined prediction of the PAQ subscales by generation status, gender, and ethnicity. Previous research has shown that students who feel supported by their parents, students who believe their parents assist in facilitating independence, and students who have strong relationships with their parents are better able to cope with adjustment (Armsden & Greenberg, 1987; Kolkhorst et al., 2010; Rice et al., 1997). Others have shown that the perception of strong bonds with family is linked to a healthy mental attitude (Armsden & Greenberg, 1987). Adolescents who feel alienated and resentment toward their parents have been linked to having weaker bonds with their parents (Armsden & Greenberg, 1987).

The current study’s results revealed that non-first-generation college students feel significantly stronger about their parents being available, being more understanding, and more accepting than first-generation college students meaning first-year, first-generation college students have perceptions of a lower quality of relationship with their parents. First-generation college students also feel significantly less supported by their parents than non-first-generation college students. In addition, generation status does act as a significant predictor for affective quality of relationships as determined by Research Question Four. These results are concerning for a variety of reasons. If previous research has shown that those with stronger attachments to parents are better adjusted, is
it possible that first-generation college students may face a more difficult adjustment back to their family culture after being away at college? Although the re-entry shock results in the current study did not show this occurring after the first semester of the students’ first-year, higher levels of re-entry shock possibly could happen later within the student’s college experience once there has been more time to adjust to the college culture. Being away from family may weaken the quality of relationship or sense of support from parents for first-generation students, which could become more detrimental to them as they progress in college.

With regard to gender, results of the analyses indicated that male students have a significantly stronger perception of the quality of their relationship with their parents than female students. Men tend to feel more encouraged by their parents to make good decisions than female first-year students. One reason may be because males are less likely than females to seek advice from their parents on decisions. Therefore, they may perceive themselves as being more confident in decision-making which in turn feels as if their parents are more supportive of their judgment, resulting in a higher quality of relationship with parents. If parents are always telling their children what to do and what decisions to make, students may feel as if the relationship does not include a mutual level of respect. Female students may feel that their parents are more likely to guide their decisions and discount their judgment, resulting in a lower quality of relationship with their parents.

Gender also proved to be a negative significant predictor of parents as a source of independence. Female students are less satisfied with the feeling of independence given
to them by their parents than their male peers. This may be due to men having a stronger sense of independence from the start. Parents may tend to give boys more freedom growing up and be less over-protective, specifically for safety reasons. This may translate into women feeling as if they need to consult their parents more while growing up and even into the college years.

There was no significant difference between genders when considering parents as a source of support. This contradicts the findings by Frey et al. (2006), which indicated significantly higher scores by females compared to males on all of the PAQ subscales. Also, the fact that there was no significant difference between males and females when considering the support that they receive from parents differs from previous findings in the research that have indicated female students generally feel they have more supportive interactions with their parents (Kenny, 1994; Sax & Weintraub, 2014) than males.

Except for the parents as a source of support subscale, the findings of the current study also contradict the findings of Lapsley et al. (1990) who found that gender did not play a significant role in attachment to parents in regard to trust and communication and Kenny (1994) who found few gender differences in regard to the affective quality of relationships with parents and parents as facilitators of independence. In fact, Lapsley et al. (1990) found that men and women possess similar closeness to parents throughout a student’s entire college career.

The current study’s results showed no significant differences in regard to ethnicity and the parental attachment constructs. This is consistent with findings by Rice et al. (1997) regarding parental attachment bonds between Black and White late adolescents.
Also, ethnicity does not act as a significant predictor of the affective quality of relationships with parents, parents as facilitators of independence, or parents as a source of support. Although studies have looked at ethnicity and parental attachment on adjustment to college (Melendez & Melendez, 2010), there is limited research on adjustment back to the family culture. This is a topic that should be explored further in order to fully understand the role of family traditions and culture on readjustment to the home environment.

**Parental Attachment as a Mediator for Re-entry Shock**

The affective quality of relationships, parents as facilitators of independence, and parents as a source of support all were tested as mediating variables of re-entry shock in first-year, first-generation college students and first-year, non-first generation college students. Like Huff’s (2001) study of reverse culture shock with missionary kids, a finding of a relationship between parental attachment and reverse culture shock was expected but not found. Because there was not a significant relationship between the independent variable of generation status and the dependent variable of re-entry shock, no mediating relationship was further explored. A larger sample of first-generation college student may have increased the chances of finding a significant relationship between generation status and re-entry shock in this case.

**Limitations**

There are a few important limitations of the study including the sample size, the amount of time participants had spent away from their families, and the instrumentation. First, a relatively small sample size was used in this study. One of the limitations of the
sample size was that there was a small amount of first-generation college students who responded to the survey. In addition, the gender and ethnic response rates were not very diverse, with almost half of all participants being White, non-first-generation, females. Therefore, with a larger sample size, more first-generation college student participation, and more ethnic and gender diversity, there may be a more solid signal regarding re-entry shock from those groups of students. This low sample size also attributed to the fact that two of the three-way analyses could not be completed because there were not any participants in some of the groups being examined. Larger representation of first-year students would increase the power of the study.

Responses were obtained from students from one large state institution within the Southeastern United States. Collecting data from a variety of institution types could make the results generalizable to the first-year student population.

In addition to the small sample size, another limitation of the study was the amount of time that the first-year students had been separated from their families. Many of the previous studies on re-entry shock included participants who had been overseas for a minimum of one to ten years (Adler, 1981; Gaw, 2000; Nash, 1976). Church (1982) found that the longer a person stays in a foreign culture, the higher chance of them assimilating to the foreign culture, which in turn accounts for a more difficult re-entry to the home culture. Similarly, Sahin (1990) and Wielkiewicz and Turkowsi (2010) found that transition adjustment to the home culture was easier for those who had spent less time abroad. The current study surveyed first-year students returning from winter break; therefore, students had only been away from their family culture for about 16 weeks.
before returning home. It also seems that re-entry is a process that happens over time and this study looked at one, very specific point in time.

Also, with current technology and college students being more connected to their families, it is likely that most of the students had regular contact with their families via phone calls, texts, email, video-conferencing, or visits home within the 16 weeks. Adler (1981) found that people who spent time overseas but were in regular communication with those back home experienced fewer disappointments and surprises upon their return home. Therefore, it is possible that students were able to have a continuous connection with family and others back home and did not experience feelings of disconnectedness or alienation from their family cultures as those studying overseas.

A final limitation to consider may be the Reentry Shock Scale used. Although the reliability was tested in a pilot study and resulted in a Cronbach’s alpha of .86, this scale had never been used to measure re-entry shock for students returning to their home culture from college. All previous studies had used this scale to measure the return of sojourners to their home culture after being abroad. Therefore, additional studies using the Reentry Shock Scale should be conducted to confirm its effective use on other populations.

**Significance of the Study**

This study addresses important gaps in the current literature on first-year students, specifically, first-generation college students. Most of the quantitative research on first-year, first-generation college students has addressed adjustment and transition to college (Alessandria & Nelson, 2005; Bui, 2002; Byrd & MacDonald, 2005; Choy, 2001; Grant-
Vallone et al., 2004; Green, 2006; Hahs-Vaughn, 2004; Inkelas et al., 2006; Murphy & Hicks, 2006; Owens et al., 2010; Pascarella et al., 2003). Qualitative studies have examined family influence on first-generation college students (London, 1989, 1992). However, at the time of this study, no other published study had examined the relationship between first-generation college students and re-entry shock back to the family culture. As a matter of fact, there are also no published studies on first-year students and re-entry shock as it relates to returning to their homes or families.

The current study adds value to the existing research by providing quantitative evidence that first-year students do experience re-entry shock when they return to their home culture after being away at school, although not statistically significant among the various groups of students. In addition, the current study also supports previous research on gender and ethnic differences and how those factors relate to parental attachment (Kenny, 1994; Lapsley et al., 1990; Melendez & Melendez, 2010; Rice et al., 1997).

**Implications for Practice**

Sussman (2001) found that, in a study of professionals working abroad for six months to four years, those who were least prepared for the return to the home culture experienced the greatest amount of distress upon repatriation. Although there were not statistically significant differences among various groups and re-entry shock levels were lower than previous studies (Gaw, 2000; Seiter & Waddell, 1989), the results of the current study showed that first-year students do sometimes experience characteristics of re-entry shock at a moderate level. In particular, 58% of the respondents felt as if their friends from home had changed, 37% felt as if they and their friends have grown in
separate directions since going to college, 35% are more critical of their parents’ rules at home, 32% feel that their institutions values and beliefs are very different from those of their family culture, and 10% felt alienated upon their return home. Research has shown that the more time that someone spends abroad, the more they start to assimilate with the foreign culture and the more skeptical they become of their home culture (Sahin, 1990; Uehara, 1986; Wielkiewicz & Turkowski, 2010). Therefore, it is possible that the longer the student is in college, the more they will become disconnected with their home cultures and values and identify more with those of their college. In order to reduce distress for students upon their return to their family cultures, student affairs practitioners should consider creating educational experiences, whether formal programs or informal conversations, to assist in preparing them for the challenges they may face. College counselors should also be aware of students’ feelings of alienation by their families upon return to their home culture. Individual counseling or support groups could be offered to students struggling with these difficult transitions.

In addition, because studies have shown the importance of strong attachment during times of transition and adjustment (Kolkhorst et al., 2010; Mattanah et al., 2004), student affairs practitioners should pay special attention to the needs of students who may experience lower levels of attachment with family. First-year, first generation college students who feel less supported by their parents, may need additional preparation for the return home. Also, because college women in particular seem to experience more distress when feeling less attached to their parents (Frey et al., 2006), and the current study shows that women do not have as strong of a relationship with their parents,
women may need to be better prepared on what to expect for a successful transition back to the family culture after being away at college. One concept that student affairs practitioners could implement is Davis’s (2010) recommendation to assist college students in strengthening their relationships with parents even while they are away at school. Although Davis (2010) specifically referred to first-generation college students in his study, the idea could be expanded to other groups of students such as women. Student affairs practitioners typically involve parents in the college transition process but should consider ways to keep parents and families engaged throughout the student’s educational journey. This may keep parents and families connected and familiar with the college experience which may result in strengthened and continued healthy relationships with their students.

**Implications for Future Research**

The shortage of research on first-generation college students and their return back to their family culture is worthy of further exploration. A longitudinal study of first-generation college students compared to non-first generation and the impact of re-entry shock on their return back to their home culture could give us more insight on the topic of re-entry as a process. It may provide additional perspective on a student’s changes in values and beliefs from that of their home culture to that of their institution’s values and culture. Because personal stories may give us more insight into a student’s background and upbringing, a qualitative study on re-entry shock could also be conducted. Another option could be a mixed methods study that could determine through a quantitative
longitudinal study, if there are group differences in regard to re-entry shock and then
follow up with interviewing students from particular groups about their experiences.

Further, it is possible that the amount of contact students have with their families
while they are away at college may have an effect on re-entry shock. Future studies
could collect information on the amount, frequency, and types of communication students
have with their parents and the relationship of that to re-entry shock.

As students in the present study seemed to recognize changes in their
relationships with friends upon their return home, it may be worthy to explore re-entry
shock impact on other relationships. Martin (1986) found that students reported
negatively changed relationships with friends upon their return home from study abroad
which is similar to the responses of the first-year students in the current study. More
research may need to be done this topic in order to prepare students for those changes in
or loss of relationships.

Finally, London (1992) reported that first-generation college students sometimes
find themselves in a different socioeconomic class than their families after earning a
college degree and getting a job. Further investigation into this topic and the impact of a
college degree on re-entry to family culture would also be a noteworthy topic for future
research.

**Conclusion**

Much research has been done on first-generation college students and their
transition to college; however, there is little quantitative research on the readjustment
process back to the family culture after engaging and assimilating to the college culture.
Anecdotally, stories are told regarding the hardships that first-generation college students experience with their families and others in their communities with whom they feel they no longer have a connection or with whom they can no longer relate. Although the findings regarding re-entry shock were not statistically significant in the current study, future research should be conducted at different points of time or longitudinally to study the cultural changes that students experience over the course of their college career. From the outcome of this research, it is clear that first-year students do experience some characteristics or re-entry shock for which they should be educated on and prepared to experience. In addition, the importance of gender and generation status differences in regard to parental attachment should continue to be explored since these attachments play a major role in college student transition and success.

If student affairs practitioners truly are committed to the education of the whole student, the preparation and support for first-generation college students, and all other students lacking the cultural capital necessary to be successful in college and beyond, cannot stop after the transition to college. Programs and services should be implemented to ensure student well-being throughout the student’s college career. Some of those programs and services should be targeted at parents and families to assist them in learning more about the experiences their students face in college. Ongoing programs such as these would help those who have not experienced college for themselves to develop a better understanding of the challenges and opportunities that their students face while at school. As a result, parental attachment bonds could remain strong, making a
smooth transition back to their family culture easier when it is time for the student to return.
REFERENCES


Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Leonard, J. B. (2006). Living-learning programs and first-generation college students’ academic and social transition to


doi:10.1177/0011000095233003


APPENDIX A

DISSERTATION INSTRUMENT

Q1 Did you spend any time with your family during the winter break?
   □ Yes
   □ No

Q2 Was the fall of 2014 semester, the first time you have ever attended college?
   □ Yes
   □ No

Q3 Which best describes your current living situation while at college?
   □ Live in university-owned housing
   □ Live off campus, but not with family
   □ Live with family (parents and/or siblings)

Q4 Are you 18 years old or older?
   □ Yes
   □ No
Q5 The following questions that contain statements that describe your experiences of returning to your family culture after spending a semester at college. Please respond to each item by filling in the bubble that best describes your experiences and feelings.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>When I returned home, people did not seem interested in my experiences at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Life is more exciting when I'm at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My friends at home seemed to have changed since I've been gone.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When I returned home I felt really depressed.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I had difficulty adjusting to my home culture after returning from college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Since I have been at college, I have become more critical of my home culture's values.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>While at home, I missed college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have a lot of contact with members of my college when I'm at school.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I feel like I have changed a lot because of my experiences at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>When I returned home, I felt generally alienated.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>-----------------------------</td>
<td>----------</td>
<td>-------------------</td>
</tr>
<tr>
<td>My friends from home and I have grown in separate directions since I have been at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Life at home is boring after the excitement of being at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>While at home, I missed the friends that I had made at college.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Since I have been at college, I have become more critical of my parents' rules.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>My friends and family have pressured me to &quot;fit in&quot; upon returning home.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>The values and beliefs of my college community are very different from those of my home culture.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
The following questions contain statements that describe family relationships and the kinds of feelings and experiences frequently reported by young adults. Please respond to each item by filling in the bubble that best describes your parents, your relationship with your parents, and your experiences and feelings. Please provide a single rating to describe your parents and your relationship with them. If only one parent is living, or if your parents are divorced, respond with reference to your living parent or the parent with whom you feel closest.

Q6 In general, my parents...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>are persons I can count on to provide emotional support when I feel troubled.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>support my goals and interests.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>live in a different world.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>understand my problems and concerns.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>respect my privacy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>restrict my freedom or independence.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>are available to give me advice or guidance when I want it.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>take my opinions seriously.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>encourage me to make my own decisions.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>are critical of what I can do.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>impose their ideas and values on me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>have given me as much attention as I have wanted.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>are persons to whom I can express differences of opinion on important matters.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td></td>
<td>Not at All</td>
<td>Somewhat</td>
<td>A Moderate Amount</td>
<td>Quite a Bit</td>
<td>Very Much</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------</td>
<td>----------</td>
<td>-------------------</td>
<td>-------------</td>
<td>-----------</td>
</tr>
<tr>
<td>have no idea what I am feeling or</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>thinking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have provided me with the freedom to</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>experiment and learn new things on</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>my own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are too busy or otherwise involved</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>to help me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>have trust and confidence in me.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>try to control my life.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>protect me from danger and difficulty.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>ignore what I have to say.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>are sensitive to my feelings and</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are disappointed in me.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>give me advice whether or not I want</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>respect my judgment and decisions,</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>even if different from what they</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>would want.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>do things for me, which I could do</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>for myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>are persons whose expectations I feel</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>obligated to meet.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>treat me like a younger child.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q7 During recent visits or time spent together, my parents were persons...

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>I looked forward to seeing. with whom I argued.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>with whom I felt relaxed and comfortable.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>who made me angry.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I wanted to be with all the time</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>towards whom I felt cold and distant.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>who got on my nerves.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>who aroused feelings of guilt and anxiety.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>to whom I enjoyed telling about the things I have done and learned.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>for whom I felt a feeling of love.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I tried to ignore.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>to whom I confided my most personal thoughts and feelings.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>whose company I enjoyed.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>I avoided telling about my experiences.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q8 Following time spent together, I leave my parents...

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>with warm and positive feelings.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>feeling let down and disappointed by my family.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Q9 When I have a serious problem or an important decision to make...

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>I look to my family for support, encouragement, and/or guidance.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I seek help from a professional, such as a therapist, college counselor, or clergy.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I think about how my family might respond and what they might say.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I work it out on my own, without help or discussion with others.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I discuss the matter with a friend.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I know that my family will know what to do.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I contact my family if I am not able to resolve the situation after talking it over with my friends.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>
Q10 When I go to my parents for help...

<table>
<thead>
<tr>
<th>Statement</th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel more confident in my ability to handle the problems on my own.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I continue to feel unsure of myself.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I feel that I would have obtained more understanding and comfort from a friend.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I feel confident that things will work out as long as I follow my parent’s advice.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>I am disappointed with their response.</td>
<td>☒</td>
<td>☐</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

Q11 Which of the following best describes your gender?
- ☐ Male
- ☒ Female
- ☐ Other ____________________

Q12 With which ethnicity do you most closely identify?
- ☐ Caucasian / White
- ☒ African American / Black
- ☐ Latina/o / Hispanic
- ☐ Asian / Pacific Islander
- ☐ Asian / Middle Eastern
- ☐ Asian / South Asian
- ☐ Native American
- ☐ Other ____________________

Q13 Do you have siblings?
- ☐ Yes
- ☒ No

Q14 Were you the first among your siblings to go to college?
- ☐ Yes
- ☒ No
Q15 Mother's highest level of education
● Some high school
● High school / GED
● Some college
● College graduate
● Advanced degree
● Unknown

Q16 Father's highest level of education
● Some high school
● High school / GED
● Some college
● College graduate
● Advanced degree
● Unknown

Q17 Is English the primary language spoken in your home?
● Yes
● No

Q18 Which of the following best describes your age range?
● 18-23
● 23 or above

Q19 How far does your immediate family live from you when you are at school?
● Within an hour drive
● One hour to four-hour drive
● Four or more hour drive

Thank you for participating in the study. You will now be directed to another survey in order to enter a drawing for one of four $25 gift cards to Amazon.com. On that page, you will be asked to enter your email address for the drawing. By directing you to another page, your responses for the study will not link up to your email address that you include for the drawing. Click the arrow button to proceed to the drawing.
APPENDIX B

INVITATION TO PARTICIPATE

Dear student,

My name is Mary Anderson, and I am a graduate doctoral student in the Teacher Education and Higher Education Ph.D. program at UNC Greensboro. I am writing to invite you to participate in my dissertation research study about first-year college students’ readjustment experiences to their family culture after being away at college for a semester. You’re eligible to be in this study because you are a first-time, first-year student. I obtained your email information from your university’s Registrar’s Office as it is considered directory information and therefore available to the public.

If you decide to participate in this study, you will be asked to complete a brief 84-question survey that will take you approximately 15 minutes. The survey questions will ask you about experiences with college, friends, and family. In addition, you will be asked to complete some demographic questions. All responses will be anonymous and your identity will not be known. Upon completion of the survey, you will be given the opportunity to provide contact information if you would like to be entered into a drawing for one of four $25 Amazon.com gift cards. If you are chosen as a winner, the gift card will be sent to you electronically.

Remember, your participation in this study is completely voluntary. If you have any questions about the study at any time, please email or contact me at meander2@uncg.edu or (336) 256-8616. If you’d like to participate in the study, please click the anonymous email link below. The survey will remain open until January 26, 2015.

Thank you very much.

Sincerely,

Mary Anderson
APPENDIX C

INFORMED CONSENT

Informed Consent Form

Project Title: First-year readjustment to Family Culture: The Roles of Generation Status and Parental Attachment on Re-entry Shock
Principal Investigator (PI): Mary Anderson
PI Telephone Number: (336) 256-8616
PI E-mail: meander2@uncg.edu
Dissertation Chair: Dr. Deborah Taub
Faculty Telephone Number: (336) 334-4668
Faculty E-mail: djtaub@uncg.edu
Location of Study: University of North Carolina at Greensboro

You are asked to participate in a study that will explore experiences of first year students in regard to parental attachment and re-entry shock. Your participation is voluntary.

To be eligible to participate in this, you must be a first-year student who is 18 years of age or older. Your opinions and experiences are valuable to understanding the unique factors that impact a first-year college student’s transition back to their family after being away at college. This form is known as an "informed consent" which allows you to understand the study prior to participating.

This study is being conducted by a University of North Carolina at Greensboro doctoral student named Mary Anderson. Mary will be the primary investigator, and will personally collect all data during this study.

Background Information: This study uses two pre-existing surveys that have been slightly changed to measure parental attachment and re-entry shock of first-year college students upon their return to their families after being away at college.

If you agree to be in this study, you will be asked to answer a brief survey. The total estimated amount of time that you will be involved in this study is about 15 minutes.

Potential Risks: There are minimal risks for participating in this study; however, you could experience feelings of discomfort or uneasiness in answering some of the questions. Participants may find that answering questions on the survey may reveal feelings to themselves that they were not previously aware of. If you feel uncomfortable or distressed at any time during the survey you should feel free to terminate participation. In addition, free on-campus counseling services are available to you through the Gove Student Health Center. You may contact the Counseling Center at (336) 334-5340 or walk in for an appointment Monday through Thursday from 12 p.m. until 5 p.m. or on Friday from 12 p.m. until 4 p.m. If you have questions, want more information or have suggestions, please contact Mary Anderson, principal investigator, at (336) 256-8616 or Dr. Deborah Taub, faculty advisor, at (336) 334-4668. If you have any concern 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 Integrity at UNCG toll-free (855) 251-2351.
Potential Benefits:
The potential benefits of being in this study include the opportunity to provide experiences that may help others to better understand the transition that first-year college students experience when returning to their families after being away at college.

Compensation/ Costs:
After completing the survey, you will have the opportunity to provide your contact information to be entered into a drawing for one of four $25 Amazon Gift cards. Your contact information will be kept separate from your responses to protect your anonymity.

Confidentiality and Privacy Protections: Your identity in this study is completely anonymous. Results of the study, including all collected data will be published in the primary investigator’s dissertation and possibly published articles in professional journals or presented at scholarly conferences. As the primary researcher, Mary Anderson will be the only individual to view and maintain your results. All feedback will be assigned a unique number. The researcher will not save any identifying information or include any identifying information for any individual in reports of the results. All information obtained in this study is strictly confidential unless disclosure is required by law. The researchers will ensure that the participants’ confidentiality is protected using a password-protected laptop stored in the primary researcher’s home. The data will be accessible by the researchers only. Absolute confidentiality of data provided through the Internet cannot be guaranteed due to the limited protections of Internet access. Please be sure to close your browser when finished so no one will be able to see what you have been doing.

If at any time you have questions regarding this research or your participation in it, you should contact the investigator, Mary Anderson, doctoral student, who must answer your questions. She can be reached at meander2@uncg.edu or (336) 256-8616.

Approved IRB
1/7/15

Consent:
Clicking yes and completing this survey indicates your consent to participate.

Would you like to participate in this brief survey?

- ☐ Yes
- ☐ No
Dear student,

As a graduate doctoral student in the Teacher Education and Higher Education Ph.D. program, I recently sent you an invitation to participate in my dissertation research study about first-year college students’ readjustment experiences to their family culture after being away at college for a semester. Please consider this a reminder that I would greatly appreciate your input.

The brief survey will take you approximately 15 minutes. Upon completion of the survey, you will be given the opportunity to be entered into a drawing for one of four $25 Amazon.com gift cards.

Remember, your participation in this study is completely voluntary. Please click the anonymous email link below to participate.

Thank you very much.

Sincerely,

Mary Anderson
Dear student,

There are only a couple days left to participate in my dissertation research study about first-year college students’ readjustment experiences to their family culture after being away at college for a semester. Please consider assisting with this important study.

Upon completion of the survey, you will be given the opportunity to be entered into a drawing for one of four $25 Amazon.com gift cards.

Remember, your participation in this study is completely voluntary. Please click the anonymous email link below to participate. The survey will close on February 2, 2015.

Thank you very much.

Sincerely,

Mary Anderson
Re: Requesting a copy of RSS

John S. Seiter <john.seiter@usu.edu>
To: Mary Anderson <meander2@uncg.edu>

Hello Mary,

Thank you for your interest. I've attached it. Feel free to use it and best of luck!

John

On Feb 28, 2013, at 2:28 AM, Mary Anderson wrote:

Dear Dr. Seiter,

My name is Mary Anderson and I am a doctoral student in Educational Studies at the University of North Carolina at Greensboro. I am conducting a research project for my dissertation, and I may be interested in using the Reentry Shock Scale in my study. Thus, I am hoping that you will provide me with a copy of this measure and possible permission to use this instrument. I have looked in the literature and online and could not determine how to request this measure; therefore, I am contacting you directly. I am studying whether first-generation college students may experience symptoms of reverse culture shock when returning to their home culture after being away at college.

Thank you very much for your consideration,

Mary Anderson
APPENDIX G
PERMISSION TO USE PAQ

BOSTON COLLEGE
CHESTNUT HILL, MASSACHUSETTS 02167
School of Education

DEPARTMENT OF COUNSELING, DEVELOPMENTAL
PSYCHOLOGY, AND RESEARCH METHODS
Campion 307
(617)552-4030
Fax (617)552-8419

Dear Colleague:

You have my permission to reproduce and use the Parental Attachment Questionnaire for research purposes. Please send me a copy of your findings to include in the compendium of studies using the PAQ.

Sincerely,

Maureen Kenny, Ph.D.
Associate Professor
Department of Counseling, Developmental Psychology and Research Methods
Boston College