# An Examination of the Relationship between Helicopter Parenting and College Adjustment and the Effects of Emotional Intelligence

by

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#### Abstract

The term, helicopter parenting, was coined to describe how the parents of the children born in the millennium generation are involved in every aspect of their children's lives in developmentally inappropriate ways, especially in educational settings like colleges and universities. The research on the helicopter parenting phenomenon indicates that there is no clear definition of helicopter parenting and that concept of helicopter parenting has both positive and negative outcomes among adult college children. The present study examined the relationship between student perceived helicopter parenting, other styles of parenting, parental attachment, and adjustment to college. In addition, the study explored the effects of emotional intelligence (EI) on the relationship between helicopter parenting and college adjustment. The results indicated that helicopter parenting was related to more than one style of parental authority and a lack of parental fostering of autonomy. Higher levels of helicopter parenting predicted lower levels of adjustment to college. Additionally, EI did not mediate or moderate the relationship between helicopter parenting and college adjustment; however, this research demonstrated that EI had a greater positive influence in students' ability to adjust to college than did the negative influence of their parents' helicopter parenting behavior. The results have implications for psychologists working in college counseling.

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### **Table of Contents**

Abstract	ii
Acknowledgement	iii
List of Tables	vi
List of Figures	vii
Chapter 1: Introduction	1
Background	1
Parenting Among College Students	2
Adjustment to College	7
Purpose	10
Significance to Counseling Psychology	11
Research Hypotheses	12
Operational Definitions	14
Chapter 2: Literature Review	17
Parental Attachment and Parenting	17
Helicopter Parenting	23
Development and Influence of Emotional Intelligence	30
College Student Development and Adjustment	34
Summary	43
Chapter 3: Method	46
Design	46

Participants	46
Measures	47
Procedures	53
Statistical Analyses	54
Chapter 4: Results	60
Overview	60
Descriptive Statistics and Simple Correlations between Variables	60
Helicopter Parenting and Parenting Styles	61
Helicopter Parenting and Parental Attachment	62
Helicopter Parenting and College Adjustment	63
Chapter 5: Discussion	70
Implications of Findings	70
Limitations and Directions for Future Research	74
Clinical Implications	77
Conclusions	78
References	80
Appendix A: Recruitment Email	98
Appendix B: Consent Form	99
Appendix C: Demographics Questionnaire	101

## List of Tables

Table 1: Student Age, Sex, and Ethnicity	55
Table 2: Student Demographics by Semester	56
Table 3: Parent Demographics	57
Table 4: Average HPS Scores by Parent Education	59
Table 5: Descriptive Statistics and Cronbach's Alphas	67
Table 6: Parenting and Attachment Correlations	68
Table 7: Correlations of Helicopter Parenting and Student Outcomes	69

# List of Figures

Figure 1: Testing of Mediation of Emotional Intelligence	65
Figure 2: Testing of Moderation of Emotional Intelligence	66

#### I. Introduction

#### Background

College is an important period of transition for late adolescents and young adults (Conley, Travers, & Bryant, 2013). Conley et al. (2013) describe this important period as a "key developmental period of psychosocial risk versus resilience" (p. 75) and add that the experience of college is structured around new learning and the development of self-responsibility. The transition into college brings about greater academic demands (e.g., rigorous curriculum), less academic structure, increased social challenges (e.g., leaving family and friends and forming new relationships), and greater autonomy (Conley et al., 2013; Credé & Niehorster, 2012). For many students, homesickness (Conely et al., 2013), interpersonal problems (Conely et al., 2013), alcohol use and binge drinking (LaBrie, Ehret, Hummer, & Prenovost, 2012) often accompany the transition to college and have been associated with increasing amounts of distress (Conely et al., 2013), impaired academic performance (LaBrie et al., 2012), and psychological disturbances (LaBrie et al., 2012).

Student enrollment into college has increased since 1999 with more students wanting to increase occupational opportunities and potential income (Gray, Vitak, Easton, & Ellison, 2013). Two thirds of high school graduates go on to college; however, 25% of these students drop out after the first year and only half complete baccalaureate degrees within 6 years (Mattanah, Lopez, & Govern, 2011). Mattanah, Hancock, and Brand (2004) noted that despite the increasing number of students attending college and their confidence about successful graduation, student graduation rates are decreasing and student distress is increasing.

There are a range of issues that may contribute to a student's decision to leave college, such as family issues, peer relationships, and financial problems (Alarcon & Edwards, 2013; Feldt, Graham, & Dew, 2011). Krumrei-Mancuso, Newton, Kim, and Wilcox (2013) suggested

that students who drop out of college may reflect a failure of a university's support of students' adjustment and progress; thus, universities have invested increasing amounts of resources in retention efforts, including academic coaching, counseling services, and first-year experience programs. Furthermore, it seems that parents have increased their presence in the daily lives of their children who are attending college (Savage & Petree, 2011).

#### **Parenting Among College Students**

Current college students are described as Generation Y, Millennials—children born between the early eighties and mid- to late-nineties and perceived by many to be "the most protected generation of children" (p. 399) in the history of the United States (U.S.). The parents of the Millennial Generation are described as more involved with their children than former generations. By comparison, Millennials live in homes with child-proof features, carry cell phones intended for instant communication, and participate in more structured activities (LeMoyne & Buchanan, 2011).

Parental attachment and parenting among college students. The research on attachment and parenting is vast. Attachment is a meaningful and enduring emotional bond between two people (Ainsworth & Bowlby, 1991), and the way in which children attach to their parents can be described as secure or insecure (Ainsworth, Blehar, Waters, & Wall, 1978). Secure attachment facilitates affect regulation and coping skills and provides children with a sense comfort and predictability, which is an important resource for children exploring new environments. Insecure attachment facilitates developmental challenges and problems with emotional and interpersonal adjustment (Ainsworth et al., 1978; Bowlby, 1973).

Parental attachment is the extent and function of the parent-adolescent child relationship (Kenny, 1987) and includes autonomy, affective attachment, and emotional support. Research on

parent-child attachment shows its effects on identity development, managing distress, and career decision-making in adolescents and young adults (Mattanah, Lopez, & Govern, 2011). Among late adolescents and college students, parental attachment has been shown to predict social competence, relational competence, self-esteem, and emotional college adjustment (Engels, Finkenauer, Meeus, & Dekovic, 2001; Rice, Cunningham, & Young, 1997).

Attachment patterns tend to persist, usually because the way parents treat children tends to continue unchanged (Bowlby, 1988). Conceptualizations of parenting can be placed into categories of warmth, responsiveness, demandingness/control, and autonomy (Baumrind, 1967; Schaefer, 1965). Research shows that parents who demonstrate high responsiveness to and high demandingness of their children (i.e., authoritative parenting) are the most effective type of parents (Baumrind, 1971; Maccoby & Martin, 1983) and this type of parenting facilitates secure attachments (Hetherington & Parke, 1999). Parenting styles among late adolescents and college students are associated with various forms of adjustment and well-being (e.g., McKinney, Milone, & Renk, 2011), as well as maladjustment such as alcohol problems and other risk behaviors during college (Abar, Carter, & Winsler, 2009; Patock-Peckham & Morgan-Lopez, 2007).) More recently, researchers have studied the effects of parenting styles on weight-related outcomes (Fuemmeler et al., 2012), academic performance and school conduct (Kerr, Stattin, & Özdemir, 2012), attachment in adult romantic relationships (Nosko, Tieu, Lawford, & Pratt, 2011), and individual and family religiousness (Hardy, White, Zhang, & Ruchty, 2011), which is an indication that parental attitudes and behaviors have lasting influence in the lives of adult children.

The social rise of helicopter parenting. Arnett (2000) proposed that college students are in a stage of transition between adolescence and adulthood longer than in generations past.

Arnett refers to this period of development as *emerging adulthood*. Individuals in emerging adulthood are between the ages of 18 and 25. Fingerman et al. (2012) noted that fifty years ago, women and men age 20 had completed all education, joined the work force, and lived independently with their own families, leaving parents free from caring for adult children. One theory for this longer period of transition is that families now have fewer children and are able to provide more attention and resources to each child (Somers & Settles, 2010b). It is this change in family composition and other social factors that some believe assisted in the rise of *helicopter parenting* (LeMoyne & Buchanan, 2011; Somers & Settles, 2010b). Helicopter parenting, also referred to as *over-involved parenting* or *over-parenting* is described as a style of parenting where parents are involved in the lives of their young adult children in developmentally inappropriate ways (Locke, Campbell, & Kavanagh, 2012; Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012).

Other social changes that may have contributed to the rise of helicopter parenting includes (Somers & Settles, 2010b): (1) an increase in child safety concerns in relation to public child abductions and violent attacks on college campuses, (2) increased college enrollment and perceived academic competition, (3) the perception that education is a commodity sold by university personnel and bought by parents and students with an expectation of individualized attention, (4) parents' perceptions of decreased economic return on investment in their children's college education with regard to job stability, and (5) the psychological shift in maturity and responsibility of current college students. The last social factor that may have contributed to helicopter parenting is advances in technology. Technology has rapidly evolved and changed the experience of college for students (e.g., use of the smart phone with immediate access to texting, email, and social networking; Mattanah, Hancock, & Brand, 2004) and has assisted parents with

constant communication with their college students and greater access to individuals involved with their children's higher education. For example, some college administrators report that some parents directly communicate with professors with and without the child's knowledge (Somers & Settles, 2010b).

Conceptualization and outcomes of helicopter parenting. The experience of being someone's child does not stop once the individual enters adulthood (Zarit & Eggebeen, 2002), and adulthood among college students requires changes in parenting and the parent-child relationship. For example, adult college children may move out of their parents' homes to attend college, limiting day-to-day parental oversight. Further, federal law providing rights to privacy can prohibit parents from accessing information about their adult college student (U.S. Department of Education). Despite these changes, support from parents appears important for effective functioning among college students.

Little empirical research exists on helicopter parenting. The definition of helicopter parenting varies across existing literature, and helicopter parenting has not been distinguished from other parenting styles (Padilla-Walker & Nelson, 2012). There is some evidence that supports helicopter parenting being on Baumrind's (1967) responsiveness and the demandingness continuum of parenting, showing that over-parenting is related to authoritative parenting (i.e., high responsiveness and high demandingness), authoritarian parenting (i.e., low responsiveness and high demandingness), and permissive parenting (i.e., low responsiveness and low demandingness; Segrin, Woszidlo, Givertz, Bauer, and Taylor Murphy, 2012), which is in conflict with research that shows helicopter parenting as positively related to only authoritarian parenting (Odenweller, Booth-Butterfield, & Weber, 2014). Further Padilla-Walker and Nelson

(2012) suggested that helicopter parenting may be a unique pattern of basic dimensions of parenting—high warmth and support, high behavioral control, and low autonomy granting.

Qualitative research has shown that 40-60% of parents of college students engage in helicopter parenting, which is more prevalent during the first two years of college (Somers & Settles, 2010a). Additionally, there is conflicting research on the influence of helicopter parenting on outcomes studied with college students and grown adult children. For example, helicopter parenting was positively associated with psychological adjustment (Fingerman et al., 2012) and negatively associated with overall psychological well-being (LeMoyne & Buchanan, 2011). LeMoyne and Buchanan (2011) found that helicopter parenting was negatively associated with college students' positive relationships with others, whereas Segrin, Woszidlo, Givertz, Bauer, and Taylor Murphy (2012) found no association between helicopter parenting and positive relationships with others. One consistent finding has been that helicopter parenting is associated with low autonomy granting (LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012; Schiffrin et al., 2014).

Current college students are described as over dependent on parents and over protected by parents (LeMoyne & Buchanan, 2011; Locke, Campbell, & Kavanagh, 2012; Love & Thomas, 2014). This could be a problem for students if students present as over dependent on university faculty and student services. Under these circumstances, students' ability to adjust to their new environment may be hindered and the demands placed on college professionals by parents and students may be increased. Given the anecdotal reports of parental over-involvement with their college students and the limited empirical research on the helicopter style of parenting, questions remain about the construct of helicopter parenting and its influences on specific outcomes related to the college experience, including college adjustment.

#### **Adjustment to College**

Predictors of college adjustment. Research has found that predictors of college performance, persistence, and graduation include high school grade point average (GPA) and standardized test scores (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013; Sparkman, Maulding, & Roberts, 2012), ability and motivation (Alarcon & Edwards, 2013), non-cognitive skills such as empathy and social responsibility (Sedlacek & Adams-Gaston, 1992; Sparkman et al., 2012), and college adjustment (Credé & Niehorster, 2012). College adjustment is a multidimensional construct, encompassing four different aspects of adjustment that capture the demands faced by college students: academic, social, personal-emotional, and institutional attachment (Baker & Siryk, 1984). A review of the literature revealed that adjustment to college has been associated with personality traits (e.g., neuroticism and emotionality; Alarcon & Edwards, 2013; Credé & Niehorster, 2012) and social support (Credé & Niehorster, 2012). Additionally, college adjustment and school engagement have been associated with family functioning (Johnson, Gans, Kerr, & LaValle, 2010), emotion coping (Johnson et al., 2010), and helicopter parenting (Padilla-Walker & Nelson, 2012).

Chickering's psychosocial theory of college student development identifies vectors that college students navigate during their college experience, including developing competence and managing emotions (Chickering & Reisser, 1993). College students often report increasing amounts of distress which often interferes with academic performance (Conley, Travers, & Bryant, 2013). Considering the amount of stress that is associated with entering college, the ability of a student to navigate the new college environment is important for successful adjustment to college. College adjustment and success requires cognitive and non-cognitive skills. Most college-readiness programs and services includes improving cognitive skills, such as

comprehension and reasoning (Seal, Naumann, Scott, & Royce-Davis, 2011; Sparkman, Maulding, & Roberts, 2012); however, less attention has been given to assessing and improving non-cognitive skills, such as emotional intelligence and competence, for college student success.

The role of emotional intelligence. Emotional intelligence (EI), which is often used interchangeably with emotional competence (EC), is the set of skills needed for effective overall functioning of an individual (Sparkman, Maulding, & Roberts, 2012). EI is defined as one's ability to perceive, comprehend, use, and manage emotions (Blickle, Momm, Liu, Witzki & Steinmayr, 2011; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011). EI is important for mental and physical health as well as social relationships (Kotsou et al., 2011). Individual differences in EI are conceptualized as traits, abilities, or a mixed model of traits and abilities (Blickle et al., 2011; Kotsou et al., 2011; Seal, Naumann, Scott, & Royce-Davis, 2011), and in research EC and emotional adjustment in adolescents and adults have been associated with work and academic performance (Kotsou et al., 2011), social competence (Rice, Cunningham, & Young, 1997), and parental attachment (Rice et al., 1997).

Research on influences of EI among college students revealed several associations.

Higher EI is positively related to higher end-of-year college GPA (Schutte et al., 1998), higher academic performance (Joseph, Jin, Newman, & O'Boyle, 2014), decreased alcohol- and drug-related problems (Riley & Schutte, 2003), and lower personal and social college adjustment stress (Chapman & Hayslip, 2005). Additional research demonstrated that higher levels of EI is positively related to mental and physical health among college students (Bhochhibhoya, Branscum, Taylor, & Hofford, 2014; Claros & Sharma, 2012; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011; Rivers et al., 2013) and serve as a protective factor for risky behavior, such as substance abuse and promiscuity (Rivers et al., 2013). Moreover, research found that EI

among college students was improved through training and exposure to new information in college courses (Schutte & Malouff, 2002) and process-based interventions (Kotsou et al., 2011) to enhance students' emotional self-efficacy (Dacre Pool & Qualter, 2012) and intrapersonal and interpersonal functioning (Kotsou et al., 2011).

Parenting, emotional intelligence, and college adjustment. The college environment is a new opportunity for exploration and mastery for young adults and parents remain important for providing a relationship which supports the development of autonomy (Kenny, 1987). The research shows that there is a direct relationship between parental attachment, independence from parents, and parenting style and how well adolescents adjust to college. Specifically, parental autonomy granting, demandingness, and supportiveness equally predicted better college adjustment and success (e.g., academic confidence and persistence; Strage, & Brandt, 1999). Parents who showed high care and lower levels of over-protection in academic, interpersonal, and intrapersonal problems had adult college children with better adjustment to college (Klein & Pierce, 2009). Emotional college adjustment was positively related to psychological separation from parents (Lapsley, Rice, & Shadid, 1989), and authoritative parenting promoted greater academic and social college adjustment (Love & Thomas, 2014).

College adjustment requires non-cognitive skills (Sparkman, Maulding, & Roberts, 2012), such as EI, which is facilitated by secure attachments with parents (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973). Data supports the relationship between EI and parenting. Parenting literature showed that parental responsiveness, parental positive demandingness, and parental emotion-related coaching predicted higher EI in children (Alegre, 2011). Cook, Buehler, and Fletcher (2012) found that parents' psychological control was positively related to adolescents' perceptions of emotional insecurity in the parent–adolescent child relationship, and

Engels, Finkenauer, Meeus, & Dekovic (2001) found that parental attachment was positively related to better social-emotional skills (e.g., expression of feelings and insecurities).

Research also supports a direct relationship between EI and outcomes among college students as previously discussed. Additional research on EI showed that EI played a mediating and moderating role within the relationship between family factors and outcomes among late adolescents. For example, EI mediated the relationship between parental availability and a decrease in adolescents' internalizing problems (Alegre & Benson, 2010) and moderated the relationship between family environment and college adjustment (Johnson, Gans, Kerr, & Deegan, 2008).

#### **Purpose**

The existing research on parenting and outcomes with college students demonstrates various relationships between parenting styles, parental attachment, social emotional competence, and some dimensions of college adjustment. However, there is little research on the relationship between helicopter parenting, emotional intelligence, and adjustment to college. This study will examine whether similarities exist between helicopter parenting and other styles of parenting (e.g., authoritative) and dimensions of parental attachment thought to be important qualities of parenting (e.g., autonomy support). This study also will evaluate the influence of helicopter parenting on adjustment to college, as well as, examine the role of emotional intelligence in the relationship between helicopter parenting and college adjustment.

#### **Significance to Counseling Psychology**

Family involvement in college students' lives has continued to increase (Savage & Petree, 2011), and research indicates that maintaining strong family support positively influences the factors associated with college adjustment (Melendez & Melendez, 2010). At the same time,

some research suggests that families can interfere with success in college. The present study will add to the limited empirical data on the concept and construct of helicopter parenting by comparing helicopter parenting to other styles of parenting (e.g., authoritative parenting) and dimensions of attachment (e.g., parental encouragement of autonomy) thought to be important qualities of parenting. The results also will address the gaps in the literature related to the influence of helicopter parenting on specific outcomes related to the college experience.

For professional psychology, research and practice related to college students and college counseling centers are part of the roots of the field of counseling psychology (see Heppner & Neal, 1983; McCarthy, 2014). The profession continues to be concerned with addressing distress among college students and improving college adjustment. The parent-child relationship has seen much attention in professional psychology research (DeFranc & Mahalik, 2002), and problems in the parent-child relationship can increase psychological distress among college students and their use of mental health services. The primary purpose of college counseling services is to provide individual counseling to students whose personal issues interfere with their academic success (Hayes et al., 2008). College counseling is a place where student clients can process their experiences in a safe place and can learn how to effectively manage their distress. It would be important for psychologists working with distressed college students to assess their current parental relationships and focus on providing emotional support through the therapeutic-counseling relationship for students who experience difficulties in their relationships with their parents.

Counseling psychologists' roles in higher education also extend to providing mental health outreach to non-client student groups (see Boone et al., 2011) and consultation to administrators, faculty, and staff (see Kraft, 2009). A goal for colleges and universities is

student retention and degree completion, and research indicates that mental health problems among college students interfere with their ability to succeed in an academic environment (Kessler, Foster, Saunders, & Stang, 1995). Given the low utilization rates of college counseling services (Nordberg, Hayes, McAleavey, Castonguay, & Locke, 2013), the population under study will be first-year students. Adjustment to college is particularly difficult for first year students as their list of challenges includes navigating a new social environment, managing the separation from family and friends, and adapting to new roles and responsibilities (Credé & Niehorster, 2012). Moreover, helicopter parenting is more prevalent during the first two years of college (Somers & Settles, 2010b). Focusing on first-year students will allow for early interventions (e.g., mental health education and outreach) targeting adjustment and persistence which promote graduation.

#### **Research Hypotheses**

1. Helicopter parenting will be more closely related to authoritarian parenting than to authoritative and permissive parenting.

Research shows that both helicopter parenting and authoritarian parenting lead to negative outcomes among college students. For example, helicopter parenting is negatively associated with psychological well-being (LeMoyne & Buchanan, 2011), and authoritarian parenting is positively associated with poor emotional adjustment (McKinney & Power, 2012). Additionally, there is some research that demonstrates that helicopter parenting is on the responsiveness and the demandingness continuum and has been found to be related to authoritarian parenting (Odenweller, Booth-Butterfield, & Weber, 2014; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012).

2. Helicopter parenting will be negatively associated with parental attachment, specifically helicopter parenting will be more strongly associated with the parental fostering of autonomy dimension.

A consistent finding across research on helicopter parenting is that it is associated with low autonomy granting (LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012; Schiffrin et al., 2014). Fostering autonomy is important for parental attachment, and parental attachment is positively related to social competence, higher self-esteem, and psychological well-being among late adolescents (Kenny & Donaldson, 1991).

3. Higher helicopter parenting will predict lower adjustment to college.

As mentioned above, helicopter parenting can lead to negative outcomes among college students, including lower levels of overall well-being (LeMoyne & Buchanan, 2011), decreased school engagement (Padilla-Walker & Nelson, 2012), and depression (Schiffrin et al., 2014). Research has found that better adjustment to college is associated with students whose parents show high care and lower levels of over-protection across academic, interpersonal, and intrapersonal problems (Klein & Pierce, 2009).

4. EI will mediate the relationship between helicopter parenting and college adjustment.

Alegre (2011) found that parental responsiveness and parental positive demandingness predicted higher EI, and less parental psychological control was positively related to college adjustment (Soucy & Larose, 2000). Research on EI found that higher EI is positively associated with higher end-of-year college GPA (Schutte et al., 1998) and lower personal and social college adjustment stress (Chapman & Hayslip, 2005). Mediation studies found that EI mediated the

relationship between family variables (e.g., parental availability) and outcomes among late adolescents (e.g., less internalizing problems; Alegre & Benson, 2010; Keaten & Kelly, 2007).

5. If EI is not found to mediate the effects of helicopter parenting on college adjustment, EI is expected to moderate the relationship between helicopter parenting and college adjustment.

Moderation studies revealed a relationship between family, emotionality, and college adjustment. Emotional coping moderated the relationship between family variables (e.g., family environment) and college adjustment (e.g., academic and emotional adjustment; Johnson, Gans, Kerr, & Deegan, 2008; Johnson, Gans, Kerr, & LaValle, 2010).

#### **Operational Definitions**

The following are definitions of key terms that will be used in this study. Terms listed together will be used interchangeably.

- First-year student and freshman: First-year student and freshman will be defined as a
  person who is enrolled full-time in college for the first time and is attending a four-year
  college or university.
- 2. Parenting styles: Parenting styles are defined as typologies of parental authority indicating levels of responsiveness to and demandingness of children from parents. Parenting styles will be operationally defined by scores on the Parental Authority Questionnaire (PAQ1; Buri, 1991), which measures authoritarian, authoritative, and permissive styles of parenting. Individuals can have high or low scores on each style of parenting.
- 3. Parental attachment: Parental attachment is defined as college students' perceptions of parental support and the extent of help-seeking behaviors from parents and satisfaction

with the help received. Parental attachment will be operationally defined by scores on the Parental Attachment Questionnaire (PAQ2; Kenny, 1987). The PAQ2 measures the following domains: affective quality of attachment, parental fostering of autonomy, and parental role in providing emotional support. Individuals can have high or low scores on each domain of parental attachment.

- 4. Helicopter parenting: Helicopter parenting is defined as a parenting style where parents are over-involved in the lives of their young adult children by making important decisions for them. Helicopter parenting will be operationally defined by scores on the Helicopter Parenting Scale (HPS; Padilla-Walker & Nelson, 2012).
- Emotional intelligence and emotional competence: Emotional intelligence and emotional competence are operationalized by scores on the Emotional Intelligence Scale (Schutte et al., 1998).
- 6. College adjustment: College adjustment is defined as a student's adaptability to the demands of the college experience. College adjustment will be operationally defined by scores on the four dimensions of the Student Adaptation to College Questionnaire (Baker & Siryk, 1999): academic adjustment, social adjustment, personal-emotional adjustment, and institutional attachment.

#### **Summary**

Parents who are overly involved in the lives of their college students can create difficulties for administrators, instructors, mental health care providers, and campus support staff. Although parental involvement is important in development of children, distance, legal restrictions, daily social demands, and academic expectations can conflict with the desire of parents to control the experiences their children have once in college. There is no clear definition

of helicopter parenting, and there is limited and conflicting outcome data related to the influence of helicopter parenting among college students. Research suggests that helicopter parenting may be related to psychological and behavioral control in parenting behavior and also may lay on the responsiveness and the demandingness continuum of parenting. Additionally, there is extensive research on attachment and parenting related to outcomes in emerging adults including the development and influence on emotional intelligence. This research addresses the gaps in the literature on the connection between helicopter parenting and college adjustment and evaluates the role of EI that relationship. The results of this research may inform how counseling psychologists work with students struggling to adapt to college.

#### **II. Literature Review**

#### **Parental Attachment and Parenting**

Attachment is described as a meaningful and enduring emotional bond between two people (Ainsworth & Bowlby, 1991). Attachment theory was developed to explain patterns of behavior in infancy through adulthood. Attachment theory emphasizes that intimate emotional bonds between individuals are primary and a biological function of human development. The ability to make intimate emotional bonds with other individuals, sometimes in the care-seeking role (e.g., children) and sometimes in the care-giving role (e.g., parents), is viewed as a predominant feature of effective personality functioning and mental health (Bowlby, 1988). Proponents of the theory believe intimate emotional bonds facilitate development of representational models of self and the attachment figure(s) in relationship to each other. They suggest that parents' actions toward their children and response to children's development influence the type of bonds children form.

Attachment bonds children form have four defining features: proximity maintenance, separation distress, secure base, and safe haven. Proximity maintenance is the desire to be near the attachment figure, whereas, separation distress is the anxiety that occurs in the absence of the attachment figure. Secure base describes the attachment figure functioning as a base of security from which children can explore the surrounding environment, and safe haven describes the attachment figure as a place for children to return when threatened (Ainsworth, Blehar, Waters, & Wall, 1978; Zeifan & Hazan, 2008). Research has found that children have different styles of attachment when separated from and then returned to care-givers (Ainsworth et al., 1978) that relate to the aforementioned features.

Attachment bonds lead to persisting attachment patterns, which, once developed, tend to be internalized and self-perpetuating (Bowlby, 1988). Ainsworth, Blehar, Waters, and Wall (1978) found that patterns of attachment can be secure, insecure, or disorganized based on the features of the early bonds with parents. Secure attachment describes an individual who is confident that her or his parent is available, responsive, and helpful. Secure attachment provides the child with a sense comfort and predictability, which is an important resource for children exploring new environments. Secure attachment facilitates an individual's affect regulation and coping skills (Ainsworth et al., 1978; Bowlby, 1973). Insecure attachment describes an individual who is not confident or uncertain if her or his parent is available and responsive, and disorganized attachment describes an individual who lacks a clear attachment style. Children with insecure and disorganized attachments likely have more developmental challenges and problems with emotional and interpersonal adjustment (Bowlby, 1973; Rice, Cunningham, & Young, 1997). Insecure and disorganized attachments with parents are positively associated with depression and anxiety for men and women and poorer college adjustment and lower intimacy development for women (Vivona, 2000).

Attachment to parents beyond early childhood. Although initial research on attachment styles focused on young children, subsequent research indicates that children's attachment to their parents continues to be important beyond early years of life. Research on attachment shows that attachment to parents influences the social relationships of adolescents by providing a framework for how to interact with others and how to respond to the needs and feelings of others (Engels, Finkenauer, Meeus, & Dekovic, 2001; Kenny & Donaldson, 1991; Rice, Cunningham, & Young, 1997). Secure bonds with parents are essential for successful development in late adolescence (Vivona, 2000). The quality of the attachment determines

interpersonal competence and subsequent development of interpersonal distress in adolescence and adulthood. Other research shows that attachment to parents in adolescence is related to separation-individuation (DeFranc & Mahalik, 2002; Rice, 1992), mental and behavior health (Mattanah, Lopez, & Govern, 2011), self-esteem (Mothersead, Kivlighan, & Wynkoop, 1998), gender identity (Mattanah et al., 2011), social identity (Mothersead et al., 1998), social competence (Mothersead et al., 1998), academic performance (Mattanah et al., 2011), and college adjustment (Vivona, 2000).

As stated earlier, attachment was traditionally described in terms of patterns.

Conceptualizations of continued attachment during adolescence are developed around degrees of attachment security (i.e., high or low based on trust in parents and quality of communication; Armsden & Greenberg, 1987), the behaviors of parents (i.e., care and protection; Parker, Tupling, & Brown, 1979), and characteristics of the parent-child bond (Kenny, 1987). Kenny (1987) proposed a model which she believed to be theoretically consistent with Ainsworth et al.'s (1978) model of attachment as an enduring affective bond. Kenny's model of attachment with late adolescents and young adults describes the extent and function of the parent-adolescent child bond using three characteristics: parental fostering of autonomy, affective quality of attachment, and parental role in providing emotional support. Kenny referred to these characteristics of the parent-child bond as *parental attachment*.

Parental fostering of autonomy refers to the adolescent child's perception of parental availability, understanding, acceptance, and the facilitation of autonomy. Affective quality of attachment refers to the child's interest in parental interaction and the child's affect toward parents during visits. Parental role in providing emotional support refers to the child's help-

seeking behavior in stressful situations and his or her satisfaction with help obtained from parents (Kenny, 1987; 1990).

Research on parental attachment is well established. The literature includes extensive research on the relationship between parental attachment and outcomes related to adolescent development (Mattanah, Lopez, & Govern, 2011). Using Kenny's model of attachment, research indicates that higher levels of parental attachment among adolescents are positively related to social competence and higher self-esteem (Kenny & Donaldson, 1991), psychological well-being (Kenny & Donaldson, 1991), better college adjustment for women (Melendez and Melendez, 2010), and less gender role conflict in men (DeFranc & Mahalik, 2002).

Related to family variables, greater affective quality of attachment and increased parental role in providing emotional support are positively related to family cohesion (Kenny & Donaldson, 1991). Parental fostering of autonomy is positively related to expressiveness in the family and independence from family and negatively related to family control (Kenny & Donaldson, 1991). Higher levels of parental attachment are negatively related to parental over-involvement (e.g., the absence of privacy or personal autonomy), parental marital conflict, and family anxiety concerning separation (Kenny & Donaldson, 1991).

Parenting beyond early childhood years. As stated earlier, attachment patterns tend to persist, usually because the way parents treat children tends to continue unchanged (Bowlby, 1988). Bowlby (1988) proposed that the central feature of parenting is that parents are a secure base from which children and adolescents can go out into the world and return feeling welcomed, physically and emotionally nourished, and comforted from fear and distress. Parents are available, responsive, and actively intervene only when necessary. As adolescents grow older, they venture further from parents for increasing periods of time.

Parenting is often studied as a unidirectional process where parenting behavior shapes the behavior of children. Kerr, Stattin, and Özdemir, (2012) argues that parenting style is a characteristic of the parent and that parenting style is a bidirectional process in which parents and children are shaped by one another. Belsky (1984) proposed that parenting is a set of behaviors determined by multiple factors, including the parent's personality, child characteristics (e.g., temperament), and contextual factors (e.g., sources of stress and level of support). Proximal predictors of parenting are shown to be parental personality and psychological functioning, quality of the marital relationship, the parent's family of origin, and characteristics of the child being parented (Klahr & Burt, 2013).

Early conceptualizations of parenting proposed that parenting was based on acceptance, autonomy, and control (Schaefer, 1965). The most frequently researched model of parenting is Baumrind's (1967) typologies. Baumrind's research (1967; 1971) conceptualized parenting behavior as parental warmth, responsiveness, demandingness, and control, which led to the development of typologies of parenting: authoritative, authoritarian, or permissive. Baumrind (1971) described these three types of parenting patterns:

Parents of the children who were the most self-reliant, self-controlled, explorative, and content were themselves controlling and demanding; but they were also warm, rational, and receptive to the child's communication. This unique combination of high control and positive encouragement of the child's autonomous and independent strivings was called authoritative parental behavior.

Parents of children who, relative to the others, were discontent, withdrawn, and distrustful, were themselves detached and controlling, and somewhat less warm than other parents. These were called authoritarian parents.

Parents of the least self-reliant, explorative, and self-controlled children were themselves noncontrolling, nondemanding, and relatively warm. These were called permissive parents (pp. 1-2)

Extensions of Baumrind's research (1967; 1971; for an example see Maccoby & Martin, 1983) discovered a fourth typology of parenting—uninvolved parenting. Uninvolved parenting is parenting behavior that is low in responsiveness and low in demandingness. These parents appeared detached from their children and may reject their children's needs. Children of uninvolved parents tend to lack self-control and have lower self-esteem. Furthermore, Baumrind's (1971) parenting styles are associated with Ainsworth's (1978) attachment styles. Authoritative parenting promotes secure attachment, insecure attachment is promoted by authoritarian and permissive parenting due to the lack of responsiveness (authoritarian) or lack of demandingness (permissive), and uninvolved parenting promotes disorganized attachment (Hetherington & Parke, 1999).

Two recent studies on parenting style and outcomes in emerging adults (McKinney, Milone, & Renk, 2011; McKinney & Power, 2012) showed that perceived positive parenting is positively related to self-esteem, and parenting styles (i.e., authoritative, authoritarian, and permissive) are associated with emotional adjustment (i.e., self-esteem, depression, and anxiety) and types of discipline used by parents (i.e., nonviolent discipline, psychological aggression, corporal punishment, and severe physical assault). Specifically, authoritative parenting is positively associated with better emotional adjustment and negatively related to perceived harshness of discipline. Authoritarian parenting is positively associated with poor emotional adjustment and perceived harshness of discipline.

Grolnick, Ryan, and Deci (1991) identified two qualities of parenting that contribute to school performance and achievement. Autonomy support refers to the encouragement of children's ability to make their own choices, and involvement refers to knowledge about their children and spending time engaging in activities with their children. Parental autonomy support

and involvement were positively associated with children's perceived competence (Grolnick et al., 1991), autonomy (Grolnick et al., 1991), self-regulation (Grolnick & Ryan, 1989), and behavioral adjustment (Grolnick & Ryan, 1989). This research is in contrast to studies which demonstrated that high levels of parental involvement are positively associated with children's internalizing problems (Fischer, Forthun, Pidcock, & Dowd, 2007) and externalizing problems (Grolnick, Kurowski, Dunlap, & Hevey, 2000) and negatively associated with psychosocial adjustment (Grolnick et al., 2000). Schiffrin et al. (2014) proposed that it is the type rather than the amount of parental involvement that is important in child outcomes, such as psychological control and behavioral control.

Ratelle, Larose, Guay, and Senécal (2005) researched the influence of parental autonomy support and involvement on student self-processes (i.e., competence, autonomy, and relatedness) and persistence through college and found that autonomy support predicted persistence, which was mediated by students' perceived autonomy. Parental involvement predicted students' perceived autonomy and their feelings of relatedness to their college. They concluded that parental support and involvement are important in predicting student self-processes and it demonstrates the lasting contributions of parents on college student success.

#### **Helicopter Parenting**

More recent research has focused on parenting and outcomes among college students. The experience of being someone's child does not stop once the individual enters adulthood and, thus, parenting continues (Zarit & Eggebeen, 2002). Yet, characteristics of adulthood and college environments require changes in parenting. For example, adults have legal autonomy and rights to privacy that can prohibit even their parents from accessing information about them, including contacting instructors to discuss performance (U.S. Department of Education). Thus, even if adults are financially dependent on their parents, the parents have limited rights to academic

information about their adult children. Adults may move out of the household of the parents, geographically limiting the type of oversight parents can provide. Norms among peers may make it difficult for parents of adults to involve themselves in the social relationships of their adult children. And, expectations of educational outcomes include critical thinking that emphasizes autonomy in work (Stefanou, Stolk, Prince, Chen, & Lord, 2013), making it inappropriate for parents to assist or complete academic requirements for their adult children. Despite these changes, and as previously described, support from parents appears important for good functioning among college students. Thus, parents and their college student children must navigate a relationship in an environment that requires changes to the relationship. When either party is unable or unwilling to adjust to the changes demanded, conflict can develop between the environmental demands and the behaviors of the individuals.

When parents do not reduce their level of involvement in the lives of their adult children to match the college environment, they can be over-involved relative to the developmental needs of the adult child. This phenomenon of over-involved parenting is referred to as helicopter parenting and has been attributed to Cline and Fay's (1990) book, *Parenting with Love and Logic*, by several researchers (see Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012 & Schiffrin et al., 2014). Helicopter parenting is currently defined as a parenting style that involves parents who are potentially over-involved in the lives of their emerging adult child whether their children want them to be or not (Locke, Campbell, & Kavanagh, 2012; Padilla-Walker & Nelson, 2012). Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy (2012) added to this definition by including that parents apply "developmentally inappropriate tactics to their children who are otherwise able to assume adult responsibilities and autonomy" (p. 237). Other names have used to describe over-involved parenting. Lawnmower parenting describes parenting that

attempts to "smooth out and mow down" (Locke et al., 2012, p. 250) obstacles in the way of a child's success, indicating that there may be degrees to which individuals over-parent or over-involve themselves in the lives of their adult children. Regardless of the term used, over-involved parenting seems to be "a complex behavior influenced by a variety of interwoven social, economic, psychological, and cultural variables" (Somers & Settles, 2010b, p. 5), such as changes in family composition, perception that education is a commodity, and advances in technology.

The definition of helicopter parenting is unclear, and there is some debate over its influences. Regardless, helicopter parenting has been assumed to have negative outcomes for college students (Somers & Settles, 2010a; 2010b), though empirical support for such assumption is minimal. Somers and Settles (2010a; 2010b) noted that one issue with the definition of helicopter parenting is that the term does not indicate destructive behavior and has not been supported as positive or negative. Somers and Settles (2010a) go on to describe helicopter parents as parents and grandparents who are sometimes overly involved in the relationships (i.e., social, school, and employment) of students of any age and add that positive parental engagement is age appropriate, involves parent-child dialogue, and parents intervene only when additional help is needed. Parents who demonstrate negative helicopter behavior are inappropriately enmeshed in the lives of their children.

Adding to the change in dynamics of the parent-adult child relationship and the complexities of helicopter parenting are the legal aspects. In higher education, federal law restricts as well as allows parental access to adult student records. The Family Educational Rights and Privacy Act (FERPA; U.S. Department of Education) is a federal law that protects the privacy of student education records. The rights of this act transfer from parents to children when

adult children reach age 18 or enter college, which restricts parents' access to their adult children's college academic records. However, amendments to FERPA allow parents access to their adult college children's academic record if students are financially dependent on the parents and also permit parent notification of their adult children's health and safety emergencies (Baker, 2008). Moreover, autonomy in emerging adulthood becomes more complex with state and local laws dictating when adults can engage in particular behaviors, such as purchasing tobacco and alcohol (Baker, 2008).

**Theoretical conceptualization of helicopter parenting.** Helicopter parenting is not a clearly defined construct, and little empirical evidence exists to support helicopter parenting as distinct from other parenting styles (Padilla-Walker & Nelson, 2012). An exploratory investigation of over-parenting (Locke, Campbell, & Kavanagh, 2012), identified six categories of actions that parenting professionals (i.e., school psychologists, school counselors, mental health professionals outside of schools, and teachers) thought to be indicative of over-parenting based on Baumrind's (1971) conceptualization of parenting: low demandingness only (e.g., not allowing the development of life skills), high responsiveness only (e.g., constant parental supervision and intrusion of the child's privacy), high responsiveness-low demandingness (e.g., excessive assistance of the perceived needs and protection from consequences of the child's action), high demandingness only (e.g., high expectations of academic performance and public behavior), and combined high and low demandingness (e.g., high expectations of academic performance and excessive assistance when those expectations are not met). Additionally, these parenting professionals indicated that parents' high level of anxiety and high SES may contribute to over-parenting. These parenting professionals believed that children recipients of these overparenting behaviors lacked resilience, did not develop adequate life skills, had a sense of entitlement, and had high anxiety transferred from their parents.

Currently, there is some empirical data demonstrating that helicopter parenting is on the responsiveness and the demandingness continuum. Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy (2012) found that the four aspects of parent reports of over-parenting (i.e., anticipatory problem-solving, affect management, child self-direction, and tangible assistance) were associated with authoritative, authoritarian, and permissive parenting. For example, authoritative parents provide their child with tangible assistance, high levels of emotional support, and freedom to solve their own problems. Authoritarian parents restrict their children of freedom to solve their own problems, and permissive parents intervene with obstacles and problems before their children are aware of them. Additionally, Odenweller, Booth-Butterfield, and Weber (2014) found a weak yet positive association between adult children college student reports of helicopter parenting and authoritarian parenting.

Padilla-Walker and Nelson (2012) proposed that helicopter parenting is a unique pattern of basic dimensions of parenting—high warmth and support, high behavioral control, and low autonomy granting. Padilla-Walker and Nelson argued these dimensions are present in other types of parenting, such as authoritative parenting, but are unique in the way in which they are prioritized among helicopter parents. Further, when testing helicopter parenting as a distinct construct, Padilla-Walker and Nelson found that helicopter parenting among college students presented was distinct from behavioral and psychological control and concluded that helicopter parenting was more related to over-attentive and intrusive parenting usually studied in preschool children.

Demographics and typology of helicopter parents. Qualitative research (Somers & Settles, 2010a) revealed that 40-60% of parents engage in helicopter behavior, helicopter parenting is more prevalent during the first two years of college, and helicopter parenting extends beyond undergraduate studies. Helicopter parents are female and male, are from all ethnic and socioeconomic status groups, and are parents of first-generation students and parents who attended college. Gender effects showed that helicopter parenting occurred most frequently in mother-son relationships. Additionally, Somers and Settles (2010a) identified five types of helicopter parents: consumer advocates who view themselves and their children as consumers of a college degree demanding a warranty, fairness advocates who demand the best of all things (e.g., majors, professors, residence hall) in the name of fairness and equity, vicarious college students who participate in all activities with their children, toxic parents with psychological issues who are controlling and try to live their children's lives, and safety patrol parents who focus on the safety of their children's college environment. They noted that the most frequent types of helicopter parents encountered by academic professionals and student service providers are consumer and fairness advocates.

Outcomes of helicopter parenting. Four recent studies examined college student child reports of helicopter parenting and found it related to several outcomes. LeMoyne and Buchanan (2011) found that students who perceive their parents as helicopter parents have lower levels of overall well-being (i.e., autonomy, personal growth, self-acceptance, positive relations with others, environmental mastery, purpose in life). They also found those students to be more likely to use prescription medication for depression and/or anxiety and more likely to use pain medication without a prescription. Padilla-Walker and Nelson (2012) found that student perceptions of helicopter parenting were positively related to parental involvement,

guidance/advice, disclosure, and emotional support. Helicopter parenting was negatively associated with parental autonomy granting and commitment to education (school engagement). Schiffrin et al. (2014) found that adult child college student reports of helicopter parenting were related to depression and less life satisfaction, which was mediated by students' perceived unmet needs for autonomy and competence. Odenweller, Booth-Butterfield, and Weber (2014) found that helicopter parenting was positively associated with parental conformity orientation, neuroticism, and interpersonal dependency and negatively associated with coping efficacy.

Additionally, Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy (2012) found that parent reports of over-parenting is associated with lower quality parent-child communication, specifically less open and more problematic parent-child communication, and positively related with adult children's sense of entitlement. Surprisingly, parent perceived over-parenting was not related to adult children's adaptive traits of self-efficacy, emotional intelligence, and positive relationships with others. Fingerman et al. (2012) found that grown children who received intense support from parents (i.e., emotional, practical, socializing, advice, financial, and listening to daily activities) had better psychological adjustment and life satisfaction than grown children who did not receive intense support.

These six studies used different measures of the helicopter parenting concept and showed similarities and differences in the results. The consistent outcomes were positive associations with higher levels of depression and negative associations with autonomy support. The inconsistent outcomes were related to life satisfaction, quality of communication, and positive relationships with others. It clear that more research is needed to find a more clear definition of helicopter parenting and its influence on college student outcomes.

# Development and Influence of Emotional Intelligence.

The idea of multiple intelligence dates back to the 1920's when Edward Thorndike (1920) developed the theory of social intelligence, which proposed that there were three types of intelligence: scholastic, mechanical/visual, and social and practical. Scholastic (i.e. cognitive) intelligence received more focus due to unsuccessful attempts to understand and measure social intelligence (Seal, Naumann, Scott, & Royce-Davis, 2011). Several decades later, Howard Gardner (1983) again proposed that there are multiple types of intelligence and identified several constructs, including intrapersonal intelligence. Gardner defined intrapersonal intelligence as the ability to understand self (i.e., working model of self, emotions, and abilities) and to use this information for self-regulation. Although, the development and improvement of cognitive intelligence is the most researched form of intelligence to date, much research has been conducted to understand and measure intrapersonal or emotional intelligence (for examples see Goleman, 1995; 1998; Mayer & Salovey, 1997; Sternberg, 1985), including research conducted by Salovey and Mayer (1990) who coined the term emotional intelligence.

Emotional intelligence (EI) is the set of skills that contributes to overall effective functioning of an individual (Sparkman, Maulding, & Roberts, 2012). EI has been used interchangeably with emotional competence (EC) and is defined as one's ability to perceive, comprehend, use, and manage emotions (Blickle, Momm, Liu, Witzki & Steinmayr, 2011; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011) or the overlap between cognitive and non-cognitive intelligence (Seal, Naumann, Scott, & Royce-Davis, 2011). Additional conceptualizations of EI include non-cognitive competencies and skills needed for successful coping of with environmental pressures, skills for accurate reasoning about emotions and the use emotions and emotional knowledge to enhance cognition, appraisal and labeling of emotion, and

level of emotional awareness (Blickle et al., 2011). Researchers have argued that there are differences in EI and EC. EC is believed to encompass self-representations, culture, contextual factors, and the role of development, which some researchers have argued are excluded from the conceptualization of EI. (Buckley, Storino, & Saarni, 2003). EI is important for mental and physical health as well as social relationships (Kotsou et al., 2011). Individual differences in EI are conceptualized as traits, abilities (or performance-based), or a mixed model of traits and abilities (i.e. EC; Blickle et al., 2011; Kotsou et al., 2011; Seal et al., 2011).

Research on influences of EI in adolescents and adults revealed several associations. Higher EI is positively related to openness to experience dimension of individual personality (Schutte et al., 1998), higher end-of-year college GPA (Schutte et al., 1998), decreased alcoholand drug-related problems (Riley & Schutte, 2003), high work and academic performance (Joseph, Jin, Newman, & O'Boyle, 2014), and lower personal and social college adjustment stress (Chapman & Hayslip, 2005). More recent research demonstrated that increased EI is positively related to mental and physical health among college students (Bhochhibhoya, Branscum, Taylor, & Hofford, 2014; Claros & Sharma, 2012; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011; Rivers et al., 2013). Higher EI is positively associated with higher levels of physical activity and lower psychological distress (Bhochhibhoya et al., 2014) and is positively associated with lower perceived stress and decreased somatic complaints (Kotsou et al., 2011). Claros and Sharma (2012) found that higher levels of EI were associated with lower frequency of alcohol and marijuana use. Their findings are supported by Rivers et al. (2013) who found that EI served as a protective factor for risky behavior, including substance abuse, aggression, and promiscuity.

Parental influences on emotional intelligence. EI is facilitated by secure attachments with parents or primary caregivers formed during childhood (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973). The only form of communication between a mother and infant is emotional expression and related behaviors. This means of communication is supplemented by speech in later years; however, emotionally mediated communication persists as the primary characteristic of intimate relationships throughout life (Bowlby, 1988). Research suggests that emotion knowledge (i.e., discerning and defining emotional states) is important for children's interpretations and memory of their experience, and higher emotion knowledge influences areas of adjustment, such as fewer conduct problems and higher self-concept (Berzenski & Yates, 2013). Alegre (2011) pointed to the parenting literature that showed parental responsiveness, parental positive demandingness, and parental emotion-related coaching predicted higher EI in children, while parental negative demandingness predicted lower EI.

In adolescents, parents' psychological control predicted adolescents' perceptions of emotional insecurity in the parent–adolescent child relationship (Cook, Buehler, & Fletcher, 2012). In young adults, parental attachment (i.e., trust in parents and quality of communication) and relational competence (i.e., perception of competence in romantic and peer relationships) predicted better emotional adjustment (i.e., self-esteem and extent of experiencing negative moods), and parental attachment predicted better social-emotional skills (i.e., expression of feelings and insecurities, making contact with others, and giving opinions; Engels, Finkenauer, Meeus, & Dekovic, 2001). Alegre and Benson (2010) found that parental availability predicted attention to feelings and clarity of feelings, and that trait EI (i.e., a personal disposition to understand emotions) mediated the relationship between parental availability and less internalizing problems (i.e., anxious, depressed, and withdrawn) in adolescents. Greater EI also

played a mediating role between a conversation-oriented family communication pattern and lower self-reported reticence among young adults (Keaten & Kelly, 2007).

**Interventions and the effects of improving emotional intelligence.** El increases over time and may be improved through training (Mayer, Caruso, & Salovey, 1999). Research demonstrates improvement in EI among preschool children is associated with improvement in social competence and reductions in problem behaviors (Domitrovich, Cortes, & Greenberg, 2007). For support staff in residential settings, increased EI is related to improved staff-client interactions (Zijlmans, Embregts, Gerits, Bosman, & Derksen, 2014). EI increased for college students after 15 weeks with exposure to diversity issues. (Leedy & Smith, 2012). Leedy and Smith (2012) suggested that an increase in EI for college students may result from exposure to new information and experience, and there is research to support this notion (Dacre Pool & Qualter, 2012; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011; Schutte & Malouff, 2002). Schutte and Malouff (2002) found that EI (i.e., information on emotional skills) can be taught in college courses to improve student performance and retention in the first 2 years. Dacre Pool and Qualter (2012) found similar results. Their research demonstrated that teaching a college course on emotional knowledge, personality traits, and skills improves students' EI and emotional self-efficacy. In addition, Kotsou et al. (2011) found that EC can be improved through the use of a process-based intervention which focused on self-awareness, emotional competencies, and skills development and that the improvement to intra- and interpersonal functioning lasted at least one year. For college students, improvements in EI may result in the aforementioned positive associations with EI, such as higher end-of-year college GPA (Schutte et al., 1998) and lower psychological distress (Bhochhibhoya, Branscum, Taylor, & Hofford, 2014).

### **College Student Development and Adjustment**

Human development is a process where individuals grow in their ability to integrate and act on different experiences (Guardia & Evans, 2008), and the focus of emerging adulthood (ages 18-25) is identity development and forming intimate relationships (Erickson, 1968), as well as, independent exploration and change (Arnett, 2000). College students are emerging adults who have their own developmental processes. Theories of college student development have focused on complex cognitive abilities, moral decision-making, and psychosocial development (Guardia & Evans, 2008). Chickering's psychosocial theory of college student development is a non-linear theory that identifies seven areas that students navigate through during their college experience (Chickering & Reisser, 1993). Chickering and Reisser (1993) found that college student development occurs simultaneously in the first four areas, typically within the first two years. Chickering and Reisser referred to these areas as vectors, and the first four vectors are developing competence, managing emotions, moving through autonomy, and developing mature relationships. Developing competence is developing intellectual (reasoning and critical thinking skills), interpersonal (the ability to communicate and work well with others), and physical skills (involvement and attention to wellness). Managing emotions refers to a student's ability to recognize and mange emotions. Moving through autonomy toward interdependence refers to a student's ability to have an independent outlook on life and understand that successful relationships are based on interdependence. Developing mature relationships is the development of intercultural relations, appreciation for others, and tolerance. After these four vectors is establishing identity, which Chickering and Reisser found to be necessary for the full development of the last two vectors—developing purpose and developing integrity.

The conceptualization and influence of college adjustment. In order for college students to progress through Chickering's (1993) developmental areas and be successful, one may propose that a sufficient level of adjustment to their college environment is needed. Baker and Siryk (1984) conceptualized college adjustment as a multidimensional construct, encompassing four different aspects of adjustment that capture demands faced by college students: academic, social, personal-emotional, and institutional attachment. Academic adjustment relates to how well adolescents managed the educational demands of college. Social adjustment is the notion of how well adolescents deal with interpersonal relationships. Personal-emotional adjustment refers to how the student experiences general psychological distress or somatic consequences of distress. The last dimension, institutional attachment, consists of the degree to which a student feels an affiliation toward the university as an institution.

Research has found that college adjustment is a good predictor of college performance, retention, and graduation (Credé & Niehorster, 2012), in addition to other variables which include high school grade point average (GPA) and standardized test scores (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013; Sparkman, Maulding, & Roberts, 2012), ability and motivation (Alarcon & Edwards, 2013), and non-cognitive skills (Sparkman et al., 2012). High school GPA and standardized test scores have only accounted for about 25% of the variance of students' academic performance in college and have been shown to be unrelated to predicting degree completion. However, academic college adjustment was shown to predict college GPA, and institutional attachment was shown to predict retention (Credé & Niehorster, 2012). One of the strongest predictors of graduation among college students was found to be non-cognitive skills (Sparkman et al., 2012), which contributes to overall college adjustment.

The research on influences on college adjustment is extensive. The literature revealed that adjustment to college has been associated with personality traits (Credé & Niehorster, 2012; Feldt, Graham, & Dew, 2011), social support (Credé & Niehorster, 2012), use of social media (Gray, Vitak, Easton, & Ellison, 2013), academic achievement (Gregory & Garnet, 2004), and humor (Gregory & Garnet, 2004). Additionally, college adjustment has been associated with family functioning and emotion coping (Johnson, Gans, Kerr, & LaValle, 2010), separationindividuation (Hoffman, 1984; Lapsley, Rice, & Shadid, 1989; Rice, 1992), parental attachment (Credé & Niehorster, 2012; Melendez & Melendez, 2010), and parenting (Gregory & Garnet, 2004). One study found that negative college adjustment (e.g., lack of motivation and academic problems) was to shown to mediate the relationship between drinking motives related to coping and drinking consequences (e.g., inability to do homework or study and fainting suddenly; LaBrie, Ehret, Hummer, & Prenovost, 2012), indicating that a students' inability to adjust to college may increase their risky coping behaviors and decrease their persistence in college. The literature on college adjustment can be organized into several broad categories (Credé & Niehorster, 2012) and includes some of the previously mentioned associations (e.g., personality, social support, etc.). This review of college adjustment will focus on individual differences and family and parental influences.

Individual differences in college adjustment. Most research related to individual factors in college adjustment is studied using the Big Five trait model of personality (i.e., neuroticism, extraversion, openness, conscientiousness, and agreeableness; Costa & McCrae, 2003).

Research showed that neuroticism was negatively related to overall college adjustment and each dimension of college adjustment (i.e., academic, emotional, social, and institutional attachment (Credé & Niehorster, 2012; Feldt, Graham, & Dew, 2011). Conscientiousness, agreeableness,

extraversion were positively related to academic and emotional adjustment, institutional attachment, and social adjustment, respectively (Credé & Niehorster, 2012). Research did not show a relationship between openness and college adjustment (Schnuck & Handal, 2011).

Schnuck and Handal (2011) found similar results and noted several gender differences. Neuroticism was negatively related to overall college adjustment and each dimension of college adjustment; the strongest relationship was with emotional adjustment for women. Extraversion, agreeableness, and conscientiousness were all positively associated with college adjustment for men and women. Extraversion was positively related to social adjustment, institutional attachment, and overall college adjustment for women; however, for men extraversion was positively related to only social adjustment, emotional adjustment, and institutional attachment. Agreeableness was found to be positively associated with social adjustment, emotional adjustment, and institutional attachment for women and each dimension of college adjustment except social adjustment for men. Conscientiousness was positively associated with academic and emotional adjustment for women and men.

Given the general consistency of these results, one can conclude that individual differences greatly contribute to college adjustment and should be considered when researching protective and risk factors for college student success. Credé & Niehorster (2012) proposed that degrees of the Big Five personality traits would facilitate adjustment to college "by allowing students to more quickly develop new social relationships and more readily explore their new environment" (p. 138) and use their planning and organizing skills to achieve academic success. Credé & Niehorster also searched the college adjustment literature and found that other individual factors influence college adjustment, including self-esteem, locus of control, and self-efficacy. They also included emotionality to this list of individual factors. Given that neuroticism

is also known as a lack of emotional stability (Judge, Erez, Bono, & Thoresen, 2002) and a disposition underlying EI (Joseph & Newman, 2010), EI will continue to serve as the personality trait variable of interest.

Family and parental influences on college adjustment. Kenny (1987) referred to the college years as a new strange situation, referring to Ainsworth, Blehar, Waters, & Wall (1978) study on the development of attachment security. Kenny proposed that college students perceive the college environment as a new opportunity for exploration and mastery and parents remain important for providing a secure base that students could return to when needed which supports the development of autonomy. This is supported by the family systems perspective, which argues that students must differentiate from the family unit while retaining a sense of connection (Munichin, 1974).

A research study on family functioning showed that family cohesion, expressiveness, and conflict predicted college adjustment (Johnson, Gans, Kerr, & Deegan, 2010). Specifically, students who perceived their families to be cohesive prior to the start of college had less psychological distress, better academic adjustment, and increased levels of social satisfaction. Students who reported more family expressiveness reported higher levels of emotional and social college adjustment. Perceived family conflict was found to be negatively related to academic and emotional adjustment to college (Johnson et al., 2010).

The research on separation-individuation has shown that there is a direct relationship between psychological separation from parents and how well adolescents adjust to college (i.e., Lapsley, Rice, & Shadid, 1989; Rice, 1992). Emotional college adjustment was positively related to four dimensions of psychological separation (i.e., functional, emotional, attitudinal, and conflictual). Functional and emotional independence from mother and conflictual independence

from father was more strongly associated with greater emotional adjustment. No relationship was found between academic adjustment or social adjustment and psychological separation (Lapsley et al., 1989).

Related to parental attachment, social competence (i.e., social self-efficacy and social college adjustment) predicted emotional well-being (i.e., emotional college adjustment and lower levels of depression) and fully mediated the relationship between parental attachment and emotional well-being (Rice, Cunningham, & Young, 1997). In contrast, Soucy and Larose (2000) found parental attachment was not associated with college adjustment. However, a meta-analysis found that students' parental attachment and students whose parents fostered independence were both positively related to college adjustment and concluded that students developing a secure adult relationship with their parents promotes adjustment (Credé & Niehorster, 2012).

Past research demonstrated that there is a relationship between parenting style and overall college adjustment (see Chao, 2001; Gonzalez, 2001; Hickman, Toews, & Andrews, 2001; Wintre & Yaffe, 2000). For example, parental autonomy granting, demandingness, and supportiveness equally predicted college adjustment and success (i.e., academic confidence, persistence, focus on tasks, and rapport with instructors) among students living with their parents and students living on their own (Strage, & Brandt, 1999). Further, authoritative parenting was positively related to all dimensions of college adjustment (Gregory & Garnet, 2004; Hickman, Bartholomae, & McKenry, 2000).

More recent research has confirmed that the relationship between style of parenting and adjustment to college remains significant. Klein and Pierce (2009) found that better adjustment to college was associated with students whose mother and fathers showed high care and lower

levels of over-protection across academic, interpersonal, intrapersonal, and family problems. Schnuck and Handal (2011) found that perceived paternal permissiveness was associated with poorer social adjustment and overall college adjustment for women and men. Maternal authoritarian parenting was associated with poorer college adjustment for women, and maternal authoritative parenting was associated with better college adjustment for men. Similarly, Love and Thomas's research (2014) demonstrated that authoritative parenting promotes greater academic and social college adjustment and prosocial behaviors when compared to authoritarian and permissive parenting.

Additional research on parental control and involvement (Soucy & Larose, 2000) showed that paternal behavioral control was positively related to adjustment to college and promoted social adjustment and institutional attachment. Paternal psychological control was negatively related to college adjustment and promoted problems with social and emotional adjustment and institutional attachment. Psychological control by both parents predicted lower academic achievement. Other research found that perceived parental involvement predicted students' college relatedness (i.e., institutional attachment; Ratelle, Larose, Guay, & Senécal, 2005).

The relationship between family, emotional intelligence, and college adjustment.

This review of the literature shows a clear relationship between family variables and EI, family and college adjustment, and emotional traits and abilities and college adjustment. Previously mentioned mediation studies found that EI mediated the relationship between family variables (e.g., parental availability) and outcomes among late adolescents (e.g., less internalizing problems (Alegre & Benson, 2010; Keaten & Kelly, 2007). Additional moderation studies have found that there is a relationship between family, emotionality, and college adjustment. Emotional coping moderated the relationship family environment and college adjustment

(Johnson, Gans, Kerr, & Deegan, 2008). Specifically, the style of coping with anger changed the relationship between family cohesiveness and academic and emotional adjustment; students from non-cohesive families who used active coping had better adjustment than peers from non-cohesive families who used avoidance to cope with anger. Johnson, Gans, Kerr, and LaValle (2010) found the same results for students from less expressive families; students from families who expressed their feelings directly to one another and used avoidance to cope showed poorer social college adjustment.

First-year college student adjustment and success. For first-year students, the transition into college extends beyond academic changes and increased autonomy to include adapting to new responsibilities (e.g., securing daily needs), orienting themselves and becoming citizens of their campus community, and making career decisions (Credé & Niehorster, 2012). Researchers studying first-year college student success (i.e., meeting academic goals and life satisfaction) found that academic self-efficacy predicted first and second semester GPA. Stress management, emotional satisfaction with academics, and involvement with campus activities was positively related to life satisfaction, and first semester GPA mediated the relationship between achieving academic goals and life satisfaction (Krumrei-Mancuso, Newton, Kim, & Wilcox, 2013). Related to first-year college student interventions, Conley, Travers, and Bryant (2013) found that first-year students who attended a psychosocial wellness seminar reported greater improvement in psychological well-being and stress and adjustment related to college.

Although there is extensive research on college adjustment, fewer studies have included predictors of or relationships with institutional attachment (for examples see Feldt, Graham, & Dew, 2011; Ratelle, Larose, Guay, & Senécal, 2005; and Soucy & Larose, 2000). Institutional attachment refers to students' general satisfaction with the college experience and their particular

college (Baker & Siryk, 1999). From a student retention perspective, Tinto (1993) proposed that there are categories of experiences that contribute to students leaving their college or university, including adjustment (comfort and familiarity with the college environment) and incongruence (a student's needs and/or interest does not match the college). Tinto believed that a student's satisfaction and successful integration with their college environment would decrease the chances of a student leaving college before graduation, thus supporting the theoretical importance of students' attachment to their institution.

There are several reasons that may influence a student's decision to leave college, including individual factors, personal motives (e.g., homesickness), lack of integration into their college, and dissatisfaction with the institution (Alarcon & Edwards, 2013). For first-year students, factors that contribute to college retention were found to be individual factors (Alarcon & Edwards, 2012) and parental factors (Lapsley, Rice, & Shadid, 1989; Rice, 1992; Soucy & Larose, 2000). When studying the influence of individual factors on college retention, Alarcon and Edwards (2012) found that trait affectivity significantly predicted student retention.

Specifically, students with higher negative affectivity and lower positive affectivity were more likely to drop out of college. Also, students who scored lower on a scale measuring conscientiousness were more likely to leave college.

Compared to juniors and seniors, Lapsley, Rice, and Shadid (1989) found that freshman showed more psychological dependencies on both mother and father dimensions of overall independence. A longitudinal study on the freshman, found that independence from parents and college adjustment increased over time for both males and females (Rice, 1992). More recently, parental psychological control predicted lower academic achievement in the first two semesters of college (Soucy & Larose, 2000).

Current college students, Millennials, are often socialized by parents (usually authoritative parents) to feel special, promoting self-esteem and to lead these students to be academically confident (Love & Thomas, 2014). These college students have been described as over dependent on parents, over protected by parents, and sometimes entitled (LeMoyne & Buchanan, 2011; Locke, Campbell, & Kavanagh, 2012; Love & Thomas, 2014). This could be a problem for students (and perhaps parents and college professionals) if students present as over dependent on university faculty and staff and students' needs are not attended to in a manner in which students are accustomed. Under these circumstances, students' ability to adjust to their new environment may be hindered, which directly affects persistence and graduation.

## **Summary**

It appears that parenting style and dimensions of attachment are closely related and have lasting influences among college students. Qualities of parenting and attachment have been identified as important factors for academic achievement and psychosocial adjustment, and these qualities include warmth, emotional support, autonomy support, and involvement. Research revealed relationships between parenting styles and several outcomes in adult offspring: children's independence from parents, adjustment and well-being in adolescents, and risky behavior among college students. The helicopter style of parenting (i.e., over-involved parenting) is believed by many college personnel to be detrimental to the development of college students (Somers & Settles, 2010b); however, the definition and outcomes of helicopter parenting remain unclear. One consistent finding related to helicopter parenting is that helicopter parenting is negatively associated parental autonomy granting (LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012; Schiffrin et al., 2014), which is thought to be one of the central features of transitioning into college.

College transition can include increasing amounts of distress, and students' ability (or lack thereof) to adjust often can make adjustment difficult. Successful college adjustment requires cognitive skills and non-cognitive skills. Non-cognitive skills, such as EI, have received less attention in the literature related to college adjustment. Emotional intelligence is developed within secure parental attachments and allows students to effectively navigate the demands of new environments like college. EI is needed for all dimensions of health (i.e., mental, physical, and social; Kotsou, Nelis, Grégoire, & Mikolajczak, 2011), and the literature has demonstrated that emotional traits and abilities are associated with both family variables and adjustment to college (Johnson, Gans, Kerr, & Deegan; 2008; Johnson, Gans, Kerr, & LaValle, 2010).

The first two years of college constitute a pivotal time for students. In the first two years, college students develop cognitive and non-cognitive competence and learn to integrate dependence and independence in a new and demanding environment (Chickering & Reisser, 1993). Research indicates that 25% of students drop out of college within the first two years (Mattanah, Lopez, & Govern, 2011) and that helicopter parenting is more prevalent during the first two years (Somers & Settles, 2010a). Given the idea that the type of parental involvement may be important in child outcomes, the influences of child characteristics on parenting behavior, and the difficulty with adjustment of some students in college, it would be appropriate to study the influences of helicopter parenting on EI and college adjustment among first-year students. If EI plays a role in the relationship between helicopter parenting and college adjustment and given the evidence that EI and EC can be improved, the results of a study targeting helicopter parenting, emotional intelligence, and college adjustment could suggests that successful college adjustment may be achieved by interventions targeting emotional intelligence

in programs and services offered by universities, including the first-year experience programs and mental health services.

#### III. Method

The purpose of the current study was to examine the effect of helicopter parenting on adjustment to college. Using a quantitative descriptive and correlational design, the current study compared helicopter parenting to other types of parenting identified in research and dimensions of parental attachment. The study also evaluated whether there is a relationship between helicopter parenting and adjustment to college among first-year college students and examined the potential for emotional intelligence (EI) to be the mechanism through which helicopter parenting related to college adjustment.

### **Participants**

A priori power analysis determined that a minimum of 150 participants were needed to obtain adequate power for this study (.80, p < .05). Data were analyzed from 210 participants who were students at a large state university in the Southeastern region of the U.S. and met the following criteria: self-identified as first-year students enrolled in college for the first time during fall semester 2014, full-time enrollment during fall semester 2014, and non-international student status. Of the 224 participants who started the study, ten participants did not meet criteria for participation. Four participants who met criteria to participate did not complete any of the measures; therefore, their data was excluded from analyses.

Tables 1 and 2 present the demographics of the student participants. Majority of the participants were predominantly European American first-year students (85.2% European American; 5.7% African American; 3.8% Asian American; 2.9% Hispanic American; 1.0% biracial/multiracial; 1.4% other) and age 19. Seventy-two percent identified as female students. During fall semester 2014, 68.1% of student participants lived on campus, and 63.8% lived 1-4 hours away from their parent, traveling by automobile. Majority of student participants (97.6%)

reported that they intend to return to their current 4-year college in the fall term following their participation in the study. There was no significant change in students' college-related demographics in spring semester 2015.

With regard to parent demographics, majority of student participants reported demographic information and evaluated the parenting behaviors of their biological mothers (80% biological mother; 15.2% biological father; 0.5% stepmother; 1.0% female close relative; 3.3% did not identify their relationship to the parent). The age range of most parents (65.2%) was 46-55 years. The parents' relationship status was reported as follows: 80.4% married; 8.6% divorced; 3.8% single; 1.9% in a romantic partner relationship; 1.0% separated; 0.5% engaged; 0.5% widowed. Table 3 presents the above mentioned demographics and the education and income of the parents. Additionally, Table 4 presents the average scores of helicopter parenting categorized by parent education.

#### **Measures**

Demographics. The Demographics Questionnaire was developed for use in this study. The demographics questionnaire required participants to provide relevant background information. The following demographics were obtained from each study participant: age, sex, ethnicity, college-related information (e.g., year in school and enrollment status), and parent-related information (e.g., student's relations to parent and parent's level of education). Appendix A contains the Demographics Questionnaire.

Helicopter Parenting. Helicopter parenting was assessed from the students' perspective using the Helicopter Parenting Scale (HPS; Padilla-Walker & Nelson, 2012). The HPS was developed to determine if helicopter parenting was distinct from other forms of parental behavioral and psychological control, and the researchers found that helicopter parenting was a

distinct construct. The HPS is a 5-item self-report scale that measures the degree to which parents engage in important decision-making for their emerging adult children. The item response choices are on a 5-point scale from (1) *not at all like her/him* to (5) *a lot like her/him*. Participants rated each statement for the parent they talk to most frequently. Scores on the HPS were determined by summing items. Higher scores indicated higher degrees of helicopter parenting.

The HPS was developed with a sample of predominantly European American undergraduate students with at least one parent per student (Padilla-Walker & Nelson, 2012). The reliability coefficient in the development sample is .84 for student report for father and .87 for student report for mother (Padilla-Walker & Nelson, 2012). HPS scores were positively associated with psychological control, behavioral control, parental involvement (i.e., student's time spent with parents), guidance, disclosure, and emotional support for both mother and father (Padilla-Walker & Nelson, 2012). HPS scores were negatively associated with autonomy granting by mother and father and students' engagement in school (Padilla-Walker & Nelson, 2012). As such, the validity of the HPS is supported by a pattern of relationships with other variables reflecting high control, low autonomy, low independence (particularly in the domain of education), and high levels of closeness. This pattern is expected according to theories about this type of parenting and the associated behaviors.

Parenting Style. Parenting style was assessed from the students' perspective using the Parental Authority Questionnaire (PAQ1; Buri, 1991). The PAQ1 is used to measure Baumrind's (1971) definitions of parenting styles. The PAQ1 consists of 30 questions to determine permissive, authoritative, and authoritarian parenting (10 questions per parenting style). The item response choices are on a 5-point rating scale from (1) strongly disagree to (5) strongly agree.

Participants rated each statement for the parent they talk to most frequently. Scores on PAQ1 were determined by summing items for each subscale. There is no full scale score; therefore, high scores indicated a high level of the particular parenting style assessed by the subscale.

Cronbach's coefficient alpha values provided support for the internal consistency, ranging from .74 to .87, for the PAQ1 (Buri, 1991). Reported Cronbach's alphas were .75 for mother's permissive parenting, .85 for mother's authoritarianism, and .82 for mother's authoritativeness; .74 for father's permissive parenting, .87 for father's authoritarianism, and .85 for father's authoritativeness (Buri, 1991). Two-week test-retest reliability ranged from .77 to .92 (Buri, 1991). The PAQ1 has criterion-related validity. Specifically, when examining the relationship between parenting styles and parental nurturance, permissiveness was unrelated, authoritarianism was negatively related, and authoritativeness was positively related (Buri, 1991). The PAQ1 also has shown discriminant validity. Permissiveness is not related to authoritativeness, and authoritarianism is related inversely to permissiveness and authoritativeness (Buri, 1991).

Parental Attachment. Parental attachment was assessed using the Parental Attachment Questionnaire (PAQ2; Kenny, 1987). The PAQ2 is a 55-item self-report questionnaire used to assess college students' perceptions of parental support and availability and the extent of help-seeking behaviors from parents and satisfaction with help received. The PAQ2 consists of three subscales derived by factor analysis: affective quality of attachment, parental fostering of autonomy, and parental role in providing emotional support. The item response choices are on a 5-point scale from (1) not at all to (5) very much. Participants rated each statement for the parent they talk to most frequently. Scores on the PAQ2 were determined by summing items for each subscale and for the full scale. Higher scores indicated higher levels of parental attachment.

PAQ2 full-scale internal consistency (Cronbach's alpha) coefficients were reported as .95 and .93 for samples of first-year college women and men (Kenny, 1987). Kenny (1990) and Kenny and Donaldson (1991) reported adequate internal consistency for each subscale (affective quality of attachment,  $\alpha$  = .96; parental fostering of autonomy,  $\alpha$  = .88; parental role in providing emotional support,  $\alpha$  = .88). Two-week test–retest reliability has been shown to be .92 for the full scale and .82 to .91 for individual scales (Kenny, 1987). All PAQ2 subscales were significantly associated with measures of psychological functioning and social competence and negatively associated with parents' over-involvement with their children (Kenny, 1987). Additionally, consistent findings showing a relationship between the PAQ2 and assessments for psychological well-being support the construct validity of the PAQ2 (Kenny, 1987; Kenny & Donaldson, 1991). Results regarding gender differences have shown that women have higher PAQ2 scores than men in some studies (e.g., Vivona, 2000).

Emotional Intelligence. Emotional intelligence was assessed using the Emotional Intelligence Scale (EIS; Schutte et al., 1998). The EIS was developed based on Salovey and Mayer's (1990) first conceptual model of emotional intelligence, which consists of adaptive abilities of emotion and encompasses social and cognitive functions (appraisal and expression, regulation, and utilization of emotions). The EIS is a unidimensional self-report scale that measures trait emotional intelligence. It consists of 33 items and assesses the extent of one's ability to appraise, express, regulate, and use emotions. The item response choices are on a 5-point rating scale from (1) strongly disagree to (5) strongly agree. Scores on EIS were determined by summing items (three items are reversed scored) to yield an overall score. High scores indicated a higher emotional intelligence (Schutte et al., 1998).

Cronbach's coefficient alpha values provide support for the internal consistency of the EIS, ranging from .84 to .90, for three different samples (Austin, Saklofske, Huang, & McKenney, 2004; Schutte et al., 1998). The two-week test-retest reliability is .78 (Schutte et al., 1998). The EIS showed correlations with measures assessing awareness of emotion, emotion regulation and impulsivity, optimism, and depression (Schutte et al., 1998). The EIS also showed evidence for discriminant validity (Schutte et al., 1998); emotional intelligence was shown to be different from cognitive ability and unrelated to some dimensions of personality, such as neuroticism and conscientiousness. Additionally, the EIS showed evidence for predictive ability (Schutte et al., 1998) with emotional intelligence measures at the start of the academic year significantly predicting the GPA of first-year college students at the end of the year. The EIS was positively correlated to the overall score on the short form of the Bar-On Emotion Quotient Inventory, which assesses five dimensions of trait emotional intelligence (Austin, Saklofske, Huang, & McKenney, 2004).

Although the EIS is treated as unidimensional, two separate studies found evidence for four factors in the EIS, which includes the three factors identified by the creators of the scale (Petrides & Furnham, 2000; Saklofske, Austin, & Minski, 2003). One study confirmed the three factors of the EIS when compared to a revised 41-item version (Austin, Saklofske, Huang, & McKenney, 2004). Additionally, up to five factors have been identified with international populations (e.g., Bester, Jonker, & Nel, 2013; Fukuda et al., 2011). Given the inconsistency of results from factor analyses on the EIS and a recent study that found the EIS to be a valid measure for global trait EI (Gardner & Qualter, 2010), the unidimensional perspective EI was used for this study.

Adjustment to College. College adjustment was assessed using the Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1999). The SACQ was developed to assess student adjustment to college with the goal providing counselors with information that may assist in helping students adjust to the college environment. It is a 67-item self-report questionnaire normed with 1,424 first-year students at a single university and used to assess college students' academic, social, and personal-emotional adjustment to college, institutional attachment, and overall college adjustment (full scale). The academic, social, personal-emotional, and institutional adjustment and attachment subscales contain 24, 20, 15, and 15 items, respectively, with several items appearing on more than one scale. The item response choices are on a 9-point scale from (1) applies very closely to me to (9) doesn't apply to me at all. Scores on the SACQ were determined by summing items for each subscale and for the full scale. High scores indicated good college adjustment (Baker & Siryk, 1999).

The full scale reliability range of the SACQ is reported as .92 to .95 in the development samples. The subscale reliabilities in the development samples ranged from .77 to .86 for the emotional adjustment, .81 to .90 for academic adjustment, .83 to .91 for the social adjustment, and .85 to .91 for the institutional attachment (Baker & Siryk, 1989). Subsequent research in with independent samples has produced reliability coefficients that are similar to those reported by the measure authors: 92 to .95 for full scale (Dahmus & Bernardin, 1992; Marmarosh & Markin, 2007), .77 to .86 for emotional adjustment (Dahmus & Bernardin, 1992), and .76 to .92 for social adjustment (Rice, 1992). The validity of the SACQ shows that each subscale correlates with the full scale in the .7 to .8 range. Construct validity has demonstrated that the academic adjustment scale is related to student GPA and the personal-emotional adjustment scale is negatively associated with seeking psychological services. Additionally, institutional attachment

was found to be negatively related to attrition (Baker & Siryk, 1999). Research also supports the internal consistency and construct validity of the SACQ with students from diverse ethnic backgrounds (Anglin & Wade, 2007; Alvan, Belgrave, & Zea, 1996; Mattanah, Hancock, & Brand, 2004; Rice, Cunningham, & Young, 1997).

#### **Procedures**

After obtaining approval from the university Institutional Review Board, participants were recruited through electronic advertisements. Students from a large Southeastern university who were enrolled as first-year students (freshmen) during the fall semester of 2014 were sent a recruitment email (see Appendix A) via their university-assigned email during the spring and summer semesters of 2015. The recruitment email contained brief information about the study and link to the consent form (see Appendix B). Students received this email from the coordinator of first year seminars or through a distribution list managed by the university research and assessment office. Students who received the email from the coordinator of first year seminars received a total of two emails from the coordinator, sent at approximately two-week intervals. Students who received the email from the research and assessment office received a total of two emails, sent at approximately two-week intervals. Data were collected electronically through a secure, anonymous web browser using Qualtrics. As an incentive to participate, students were offered entry for a random drawing for 1 of 4 \$20 e-gift cards from Amazon.com.

Those individuals who wished to participate were invited to click a link through the recruitment email where they first received an information letter that contained information necessary to provide informed consent. Individuals who gave consent to participate indicated their intent to do so by continuing onto the study. Next, those individuals completed the Demographics Questionnaire (see Appendix C) to assess eligibility. Participants who met the

inclusion criteria were presented with the remaining measures, which were randomized to control for order effects. Following the completion of all measures, participants were provided with information on available resources if they experienced any discomfort and information on how to enter the drawing. Those who wished to enter the drawing were sent to a second survey, which enabled the information used to award recipients with the e-gift cards to remain separated from participants' responses. Participants who did not meet the inclusion criteria were routed to the end of the study and informed they are not eligible to participate.

### **Statistical Analyses**

All analyses were conducted using SPSS version 22.0. To test the hypothesis that helicopter parenting is more closely related to authoritarian parenting than to authoritative and permissive parenting and to test the hypothesis that helicopter parenting is negatively associated with overall parental attachment and more strongly related to the parental fostering of autonomy dimension, simple correlations among variables and *z*-tests of beta weights were used. Linear regression was used to test the hypothesis that higher helicopter parenting predicted lower adjustment to college.

The INDIRECT macro for SPSS (Preacher & Hayes, 2008) was used to test the hypothesized mediation model. In addition to testing traditional a, b, c, and c' path coefficients, the macro estimates direct and indirect effects using normal theory significance tests and percentile-based bootstrap confidence intervals (CIs). If the CI contains 0, it is concluded that the effect is nonsignificant. The current analyses used 1,000 bootstrapped samples with bias corrected and accelerated estimates and a 95% CI. Additionally, hierarchal regression analysis was used to test the hypothesis that EI will moderate the relationship between helicopter parenting and college adjustment. The results of these analyses are presented in Chapter 4.

Table 1: Student Age, Sex, and Ethnicity

		n	%
Age	17	1	.5
C	18	70	33.3
	19	137	65.2
	Older than 19	2	1.0
_			
Sex	Female	151	71.9
	Male	59	28.1
Ethnicity	African American/Black	12	5.7
	Asian American/Pacific Islander	8	3.8
	Biracial/Multiracial	2	1.0
	Caucasian/European American	179	85.2
	Latina/Latino/Hispanic American	6	2.9
	Other	3	1.4

**Table 2: Student Demographics by Semester** 

		Fall 2014		Spring 2015	
Demographic		n	%	n	%
Year in College <sup>a</sup>	First Year/Freshman	210	100	194	92.4
	Sophomore	210	100	194	6.7
	Junior			14	.5
	Unknown			1	.5 .5
Enrollment Status	Full-time	210	100	209	99.5
	Part Time			1	.5
Living Status	On campus	143	68.1	141	67.1
	Off campus with parents	7	3.3	7	3.3
	Off campus with roommates	49	23.3	49	23.3
	Off campus, living alone	8	3.8	10	4.8
	Off campus /other	3	1.4	3	1.4
Travel Time from					
Home	Torothon 1 home	20	12.2	20	142
	Less than 1 hour	28	13.3	30	14.3
	1-4 hours	134	63.8	133	63.3
	5-8 hours	14	6.7	13	6.2
	9 hours or more	33	15.9	32	15.2
	Unknown	1	.5	2	1.0
Intentions to Return					
to College	Return to current college			205	97.6
	Transfer to another 4-year college			1	.5
	Enlist in military services			1	.5
30. 1	Undecided	. 11		3	1.4

<sup>&</sup>lt;sup>a</sup>Student participants who indicated sophomore or junior year in college during spring semester 2015 may be have responded to the question based on their total number of accumulated credit hours which determines their student status (year in college) within the university.

**Table 3. Parent Demographics** 

Demographic		n	%
Relationship to Student	Biological mother	168	80.0
•	Stepmother	1	.5
	Biological father	32	15.2
	Female close relative	2	1.0
	Unknown	7	3.3
Age	26 - 35	2	1.0
	36 - 45	40	19.0
	46 - 55	137	65.2
	56 - 65	21	10.0
	Older than 65	3	1.4
	Unknown	7	3.3
Relationship Status	Single	8	3.8
	In a romantic relationship	4	1.9
	Engaged	1	.5
	Married	169	80.4
	Separated	2	1.0
	Divorced	18	8.6
	Widowed	1	.5
	Unknown	7	3.3
Education	High school diploma/GED	33	15.7
	Some college	2	1.0
	Associate/Technical degree	3	1.4
	Bachelor's degree	89	42.3
	Master's degree	56	26.7
	Post Master's education	1	.5
	Doctoral degree	18	8.6
	Unknown	8	3.8

**Table 3. Parent Demographics (continued)** 

Demographic		n	%
Income <sup>a</sup>	Less than \$10,000	2	1.0
	\$10,001 - \$25,000	8	3.8
	\$ 25,001 - \$40,000	9	4.3
	\$40,001 - \$75,000	28	13.3
	\$75,001 - \$100,000	31	14.8
	More than \$100,000	77	36.7
	Unknown	55	26.1

<sup>&</sup>lt;sup>a</sup>Income is the combined income of parents if students have more than one parent.

**Table 4. Average HPS Scores by Parent Education** 

	n	M	SD
Total <sup>a</sup>	159	11.23	4.16
High school diploma/GED	23	9.00	2.49
Bachelor's degree	70	11.10	4.05
Master's degree	47	12.15	4.81
Doctoral degree	13	12.77	3.88

*Note:* There is no significance difference between means.

<sup>&</sup>lt;sup>a</sup>Parents with some college or Associate/Technical degrees are included in the total number but not listed in the table (n = 4)

#### IV. Results

#### Overview

This chapter reports the results of the analyses used to test the study hypotheses. Some participants did not complete all surveys; therefore, the sample size for some analyses differs. To test hypotheses 1 and 2, simple correlations and *z*-tests of beta weights were used. To test hypotheses 3-5, regressions and bootstrapping were used. However, before interpreting the results data were screened to determine if they met the assumptions of the analysis. Data met guidelines for normality, linearity, and homoscedasticity. Simple correlations between variables are presented below, followed by the results of hypothesis testing.

## Descriptive Statistics and Simple Correlations between Variables.

Correlations were computed between each variable, and the correlations among variables used in the analyses are presented here. Table 5 presents the sample sizes, means, standard deviations, and Cronbach's alphas of each measure in the present sample. Tables 6 and 7 present correlation matrices containing correlations between helicopter parenting, types of parental authority, parental attachment, and student outcomes (i.e., emotional intelligence, adjustment to college). A positive correlation was found between helicopter parenting and permissive parenting (r = .185, p < .05), such that the higher the perceptions of helicopter parenting, the higher the perceptions of permissive parenting. Negative correlations were found between helicopter parenting and attachment dimensions, emotional intelligence, and adjustment to college. These include adverse effects of helicopter parenting to the affective quality of the attachment relationship (r = -.164, p < .05), parental fostering of autonomy (r = -.320, p < .01), emotional intelligence (r = -.193, p < .05), and overall college adjustment (r = -.300, p < .01). Furthermore,

helicopter parenting was negatively related to all aspects of college adjustment when examining subscales of the SACQ (-.22 < rs < -.35).

### **Helicopter Parenting and Parenting Styles**

**Analyses of beta weights.** To test the hypothesis that helicopter parenting will be more closely related to authoritarian parenting than to authoritative and permissive parenting (Hypothesis 1), simple correlations among variables and z-tests of beta weights were used. Calculations of the Pearson product-moment correlations for a sample size of 147 showed the following coefficients for helicopter parenting and types of parental authority: r = .185 for permissive, r = .133 for authoritarian, and r = -.122 for authoritative, with permissive being the only significant correlation (p < .05). Although the bivariate correlations indicated the hypothesis was not supported, z-tests of the beta weights were performed to further explore the relationship between helicopter parenting and types of parental authority. The results showed that one type of parenting behavior was not more closely related to helicopter parenting than another. Specifically, when comparing authoritarian with authoritative parenting, z = 0.13, p = .897. Permissive and authoritative parenting also did not significantly differ with regard to their predictive power for helicopter parenting, z = 0.66, p = .508. The z-test also revealed that permissive and authoritarian parenting did not differ in their predictive power for helicopter parenting (z = 0.59 p = .552).

**Supplemental analyses.** Given the unexpected finding of a relationship between permissive parenting and helicopter parenting and absence of a relationship between authoritarian parenting and helicopter parenting, a multiple regression was conducted to examine the unique effects of each type of parenting in predicting helicopter parenting (for permissiveness, sr = .283, p < .001; for authoritarian, sr = .175, p = .029; for authoritative, sr = .029;

.110, p = .166). Authoritative parenting was not significantly related to helicopter parenting even when controlling for the presence of other types of parenting (given that a parent can display combinations of parenting on the PAQ1). However, the regression analysis revealed a suppression effect as it related to authoritarian parenting, such that when controlling for the other types of parenting (particularly, permissive parenting), authoritarian parenting was related to helicopter parenting. In addition, the increase in the beta weight for permissive parenting predicting helicopter parenting from the bivariate correlation suggests there is also a suppression effect for permissive parenting. In other words, it appears that when controlling for other types of parenting, both permissive and authoritarian parenting relate to helicopter parenting, suggesting that helicopter parenting includes aspects of both permissive and authoritarian parenting styles (combined, these two types of parenting explain 9.0% of the variance, p = .001, in helicopter parenting).

### **Helicopter Parenting and Parental Attachment.**

**Bivariate relationships.** Simple correlations and z-tests of beta weights also were used to test the hypothesis that helicopter parenting will be negatively associated with overall parental attachment, specifically helicopter parenting will be more strongly associated the parental fostering of autonomy dimension (Hypothesis 2). Pearson product-moment correlations coefficients for a sample size of 144 for helicopter parenting and overall parental attachment, affective quality of relationship, parental fostering of autonomy, and providing emotional support were -.139, -.148, -.308, and .078, respectively, with autonomy being the only significant correlations (p < .01).

**Analyses of beta weights.** Z-tests were performed to look closer at the relationship between helicopter parenting and dimensions of parental attachment. The results of z tests

comparing the dimensions of parental attachment showed that when comparing autonomy and emotional support, there is a significant difference in the strength of relationship with helicopter parenting, z = 3.72, p < .001. The z-test of the beta weights was significant when comparing affective quality with autonomy (z = 3.78, p < .001). However, there was no difference when comparing the strength of the relationships between affective quality and helicopter parenting with emotional support and helicopter parenting (z = 1.47, p = .141). The results indicate that the magnitude of parents' lack of fostering autonomy is greater than that of parents providing emotional support and the affective quality of the relationship.

## **Helicopter Parenting and College Adjustment**

Linear regression was used to test the hypothesis that higher helicopter parenting predicted lower adjustment to college (Hypothesis 3). Helicopter parenting significantly predicted college adjustment,  $\beta = -.300$ , p < .001, accounting for a significant proportion of variance in college adjustment,  $R^2 = .09$ . The results of this linear regression indicate that higher helicopter parenting predicted lower adjustment to college.

Because parental attachment has been linked to college adjustment (Credé & Niehorster, 2012), additional analyses were run to examine the unique relationship between helicopter parenting and college adjustment after controlling for the relationship between aspects of parental attachment and college adjustment. A multiple regression was conducted to examine the unique effects of overall college adjustment and each dimension of college adjustment in predicting helicopter parenting. Overall college adjustment, social adjustment, and institutional attachment were significantly related to helicopter parenting even when controlling for the presence of overall parental attachment and each dimension of parental attachment (for overall adjustment, sr = -.175, p = .026; for social, sr = -.210, p = .011; for institutional attachment, sr

= -.274 , p = .001). Academic and emotional adjustment were significantly related to helicopter parenting when controlling for the presence of overall parental attachment (for academic adjustment, sr = -.158, p = .047; for emotional adjustment, sr = -.155, p = .042) and emotional support (for academic adjustment, sr = -.217, p = .007; for emotional adjustment, sr = -.241, p = .002). However, the regression analysis revealed academic adjustment and emotional adjustment were not significantly related to helicopter parenting when controlling for autonomy (for academic adjustment, sr = -.105, p = .184; for emotional adjustment, sr = -.084, p = .269). These results indicate that helicopter parenting has adverse effects on college adjustment even after controlling for the extent and function of the parent-child relationship and indicates the relative importance of autonomy in the relationship between helicopter parenting and important aspects college adjustment.

**Mediation analysis.** Preacher and Hayes (2008) mediator model was used to examine the direct and indirect effects of EI on the association between helicopter parenting and college adjustment (Hypothesis 4). Figure 1 illustrates the testing of EI as a mediator. The sample size for this mediation analysis was 147. Path coefficients, significance tests, and bootstrapped 95% CI for the indirect effects are as follows. The overall model was significant, F(2, 144) = 22.61, p < .001, and explained 22.8% of the variance in college adjustment. The results for the relationship between helicopter parenting and emotional intelligence (a path) was significant, indicating that higher levels of helicopter parenting predicted lower EI scores, B = -.67, SE = .27, t = -2.45, p = .015. Further, as found in the regression results and simple correlations, the relationship between emotional intelligence and college adjustment (b path) was significant for EI, b = 2.32, b = 0.43, b = 0.53, b = 0.001, indicating that EI predicts college adjustment. The total effect of helicopter parenting on college adjustment (b path) was significant, b = 0.53, b = 0.54, b = 0.54,

1.55, t = -3.72, p < .001. Finally, the direct effect (c' path) was significant, B = -4.21, SE = 1.45, t = -2.91, p = .004. Under the normal theory test, the ab path was significant at p = .025, and the results of the bootstrap test showed the inclusion of zero in a bias corrected and accelerated CI [-3.61, .32]. The significance of the direct effect (c' path) and the results of the bootstrap test indicate that EI does not mediate the relationship between helicopter parenting and college adjustment.

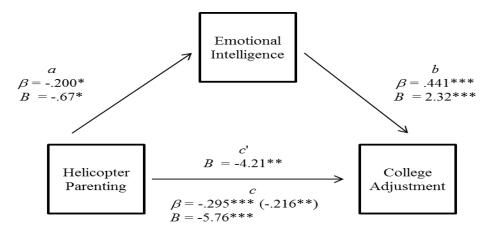


Figure 1. Testing of Mediation of Emotional Intelligence Note:  $\beta = (-.216**)$  is for helicopter parenting after adding EI as a mediator.

\*p < .05; \*\*p < .01; \*\*\*p < .001

**Moderation analysis.** The data did not support the hypothesis that EI would mediate the relationship between helicopter parenting and college adjustment. As a result, a hierarchical regression was conducted in order to determine if EI served as a moderator in the relationship between helicopter parenting and college adjustment (Hypothesis 5). Figure 2 illustrates the testing of EI as a moderator. Helicopter parenting and EI were entered into the regression to test for main effects. Next, all variables were centered to control for

multicollinearity, and an interaction variable between helicopter parenting and EI was created. Each centered predictor variable and the interaction variable were entered into consecutive blocks of the regression. Helicopter parenting and EI accounted for a significant amount of variability in students' college adjustment ( $R^2 = .239$ , p < .001), and EI made a significant contribution to the prediction of variance in students' college adjustment beyond the contribution made by helicopter parenting ( $R^2$  change = .152, p < .001). However, the interaction of helicopter parenting and EI did not make a significant contribution to the prediction of college adjustment ( $R^2$  change = .009, p = .188), indicating that EI does not moderate the relationship between helicopter parenting and adjustment to college.

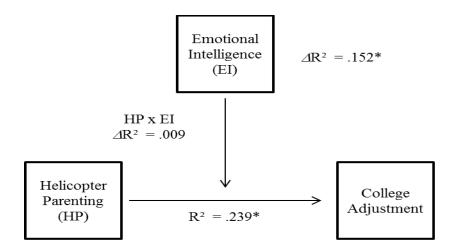


Figure 2. Testing of Moderation of Emotional Intelligence \*p < .001

**Table 5. Descriptive Statistics and Cronbach's Alphas** 

	n	M	SD	α
HPS	159	11.23	4.16	.79
PAQ1 Permissive Scale	155	23.86	5.99	.79
PAQ1 Authoritarian Scale	156	33.96	6.56	.84
PAQ1 Authoritative Scale	155	36.90	7.08	.89
PAQ2 Full Scale	162	204.09	39.74	.97
Affective Quality Subscale	161	105.06	21.86	.96
Autonomy Subscale	168	53.33	11.47	.92
Emotional Support Subscale	163	48.20	10.28	.88
EIS	168	124.36	14.04	.89
SACQ Full Scale	156	414.09	80.37	.96
Academic Subscale	156	150.45	29.72	.90
Emotional Subscale	157	82.82	25.13	.90
Social Subscale	157	120.07	29.15	.90
Attachment Subscale	157	107.32	22.83	.91

Note: HPS = Helicopter Parenting Scale. PAQ1 = Parental Authority Questionnaire. PAQ2 = Parental Attachment Questionnaire. EIS = Emotional Intelligence Scale.

SACQ = Student Adjustment to College Questionnaire.

**Table 6. Parenting and Attachment Correlations** 

Variable (n)	1	2	3	4	5	6	7	8
1. Helicopter Parenting								
2. Permissiveness	.185* (147)							
3. Authoritarianism	.128 (148)	425** (155)						
4. Authoritativeness	122 (147)	.336** (155)	483** (155)					
5. Parental Attachment	147 (149)	.228** (138)	401** (139)	.738** (138)				
6. Affective Quality	164* (148)	.182* (142)	421** (143)	.709** (142)	.979** (159)			
7. Autonomy	320** (150)	.261** (147)	487** (148)	.721** (147)	.903** (161)	.847** (158)		
8. Emotional Support	.062 (150)	.219** (144)	201* (145)	.657** (144)	.891** (161)	.838** (160)	.688** (160)	

**Table 7. Correlations of Helicopter Parenting and Student Outcomes** 

Variable (n)	1	2	3	4	5	6	7
1.Helicopter Parenting							
2. Emotional Intelligence	193* (153)						
3. College Adjustment	300** (148)	.421** (150)					
4. Academic Adjustment	219** (148)	.315** (150)	.831** (150)				
5. Emotional Adjustment	235** (149)	.307** (151)	.875** (150)	.667** (156)			
6. Social Adjustment	256** (149)	.448** (151)	.792** (150)	.417** (156)	.566** (157)		
7. Attachment to College	349** (149)	.353** (151)	.879** (150)	.564** (156)	.680** (157)	.864** (157)	

<sup>\*</sup>*p* < .05; \*\**p* < .01

#### V. Discussion

The following chapter discusses the implications of the findings presented in Chapter 4 and addresses the limitations of this research. Additionally, this chapter presents suggestions for future research and clinical applications of the results. As previously stated, the purpose this study was to examine whether similarities exist between helicopter parenting and other styles of parenting (e.g., authoritative) and dimensions of parental attachment thought to be important qualities of parenting (e.g., autonomy support), as well as, to evaluate the influence of helicopter parenting on college adjustment and examine the role of emotional intelligence in the relationship between helicopter parenting and college adjustment. The study design was correlational and used regression and bootstrapping to determine relationships between variables of interest.

## **Implications of Findings**

Helicopter parenting relates to different styles of parental authority. The results of this study did not support the hypothesis that helicopter parenting is more closely related to authoritarian parenting than authoritative and permissive parenting. The results showed a significant positive relationship with permissive parenting, which provides some evidence that helicopter parenting may be on the responsiveness and the demandingness continuum conceptualized by Baumrind (1967; 1971). Although the positive relationship between helicopter parenting and authoritarian parenting was not significant, there was no difference in how permissiveness and authoritarianism related to helicopter parenting. In other words, despite the fact that permissive parenting significantly predicted helicopter parenting and the other types of parenting did not, the relative importance of permissive parenting over other styles in predicting helicopter parenting was minimal. Permissive parenting is characterized as high responsiveness

and warmth and low demandingness and control, and authoritarian parenting is characterized as low responsiveness and warmth and high demandingness and control (Baumrind, 1971); both of which lead to negative outcomes in children (Baumrind, 1971; McKinney, Milone, & Renk, 2011; McKinney & Power, 2012). The results may indicate that parents who are overinvolved in their children's lives may provide high levels warmth and support while maintaining an inappropriate level of control of their children's actions. The suppression effect for authoritarian parenting also suggest that there may be some unique relationship between high control (as a form of demandingness) with low responsiveness in helicopter parenting as well. In other words, there may be different styles of parenting that relate to helicopter parenting behaviors and those parental behaviors could serve different purposes depending on the type of parenting.

This is not the first study to explore the relationship with helicopter parenting and parental authority, and there has been conflicting data concerning helicopter parenting's relationship with parental authority. Odenweller, Booth-Butterfield, and Weber (2014) found that student reports of helicopter parenting were positively related to authoritarian parenting. In the present study, such a relationship was only found when controlling for the students' perceptions with regard to the presence of other types of parenting behaviors. Additionally, Segrin, Woszidlo, Givertz, Bauer, and Taylor Murphy (2012) found that aspects of parent reports of helicopter parenting were positively related to authoritarian, authoritative, and permissive parenting. Given the differences in the associations between helicopter parenting and degrees of responsiveness and demandingness indicated by the present study's results and previous research, it is likely that helicopter parenting is a unique pattern of basic dimensions of parenting, which is an idea proposed by Padilla-Walker and Nelson (2012) when examining helicopter parenting as a distinct construct. Based on research on helicopter parenting conducted

by Locke, Campbell, and Kavanagh (2012) and Segrin, Woszidlo, Givertz, Bauer, and Taylor Murphy (2012), high responsiveness could mean that helicopter parents prevent obstacles and intervene with problems that may occur before their children are aware of the problems, which involves constant supervision and intrusive behavior. A combination of high and low demandingness may indicate that helicopter parents have high expectations their children's behavior and performance (e.g., academic) and provide excessive assistance when those expectations are not met.

Helicopter parenting promotes low parental fostering of autonomy. The results of this study supported the hypothesis that helicopter parenting would be negatively related to parental attachment, specifically the parental fostering of autonomy dimension. The negative relationship between helicopter parenting and overall parental attachment was not significant; however, the results showed that helicopter parenting was negatively associated with affective quality of attachment and parental fostering of autonomy. Further exploration of the relationship between helicopter parenting and dimensions of parental attachment revealed that helicopter parenting had a relationship with the autonomy dimension of attachment that was significantly stronger than its relationship to other dimensions of attachment, which is consistent with previous research on helicopter parenting (LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012; Schiffrin et al., 2014).

Parental attachment describes the extent and function of the parent-child bond and features parental availability, understanding, acceptance, and autonomy granting, as well as, children's interest and affect toward parents and help-seeking behaviors (Kenny, 1987; 1990). These results indicate that students with helicopter parents may perceive their parents to be less accepting and less supportive of autonomous behavior, as well as, have little interest in and

negative affect toward their parents. Despite these perceptions, students with helicopter parents seek their parents help when needed and are satisfied with the help that they receive. The perceptions and behaviors of these students taken together may promote a less positive overall attachment but maintain a functional relationship between the parent and child.

Higher levels of helicopter parenting promote poorer adjustment to college. The results of this study supported the hypothesis that higher helicopter parenting predicted lower adjustment to college. The results of the study showed that helicopter parenting had a significant negative relationship with overall college adjustment, as well as, each dimension of college adjustment: academic, emotional, social, and institutional attachment. Further exploration of the relationship between helicopter parenting and college adjustment revealed that helicopter parenting had a negative relationship with important aspects of college adjustment even after controlling for characteristics of the parent-child relationship (i.e., parental attachment).

Moreover, the relationship between helicopter parenting and dimensions of college adjustment (i.e., academic and emotional) were weakened after controlling for autonomy, which provided more evidence for the previously discussed relationship between helicopter parenting and low autonomy support.

The concept of helicopter parenting is often discussed in the context of college students, and over-involved parenting is believed by many college personnel to be detrimental to the development of college students (Somers & Settles, 2010b). Prior to the present study, research on helicopter parenting had not explored the relationship between helicopter parenting and aspects of the college experience, such as college adjustment. The results of this study indicate that helicopter parenting has a negative influence on college adjustment, which may lead to students' poorer college performance and persistence to graduation.

Emotional intelligence (EI) has a significant impact on college adjustment. The results of this study did not support the hypotheses that EI would mediate or moderate the relationship between helicopter parenting and adjustment to college. The results showed that helicopter parenting had a significantly negative relationship with EI and that EI had a significantly positive relationship with college adjustment. However, EI did not mediate or moderate the relationship between helicopter parenting and college adjustment. The moderation analysis of EI demonstrated that EI had a greater positive influence in students' ability to adjust to college than did the negative influence of their parents' helicopter parenting behavior. Given that EI has been found to be important for higher academic performance (Joseph, Jin, Newman, & O'Boyle, 2014; Schutte et al., 1998) and lower personal and social college adjustment stress (Chapman & Hayslip, 2005), the results provide more support for the usefulness of teaching high school students emotion-centered knowledge and skills for college preparedness and conducting emotion-centered interventions with college students for long-term college adjustment.

## **Limitations and Directions for Future Research**

This study offers meaningful insights; however, there are several limitations to acknowledge. First, the sample was largely homogenous. The majority of the present sample consisted of first-year students who identified as European American (85.2%), female (71.9%), age 19 (65.2%), living on campus (68%), and living one to four hours from their parent (63.8%). Related to the characteristics of the parents, 80% of students reported on their biological mothers; 65.2% of parents were between the ages of 46 to 55 years, and 80.4% of parents were married. Parent socioeconomic status (SES) variables showed that 78.1% of parents have attained a bachelor's degree or higher, and 64.1% of parents earned an income of at least \$40,000. Thus, the generalizability of these results extends only to students who share these characteristics with similar parent characteristics. Future research would benefit from conducting

this research with a more diverse sample, including increasing the number of ethnic groups represented, males, first-generation college students, and students from lower SES families.

Given the strong association between helicopter parenting and parental fostering of autonomy, one particular area of future research could focus on racial and ethnic cultural considerations in understanding helicopter parenting. Parents' beliefs and practices reflect the norms of their culture (Keller, 2003), and the content of these beliefs and practices varies across cultures (Harwood, Miller, & Irizarry, 1995). One conceptualization of cultural differences is the collectivism–individualism distinction (Triandis, 2000). Collectivism is characterized by a sense of community and interdependence where the priority is the support and survival of the group (Tamis-LeMonda et. al, 2008). In cultures that are more relationship-oriented (e.g., African-American), a reduction in autonomy may hold a different meaning and be guided by a different set of motivations than communities that value autonomy and independence (i.e., individualistic). More research is needed to determine if less autonomy support within diverse groups adversely affects outcomes among children, especially in the college environment where autonomy is thought to be one of the central features of transitioning into college.

Second, the results reflect only the participants' perception of their parents' authority and attachment and may have been influenced by a single-source bias. Some researchers believe that true understanding of children's psychosocial outcomes is obtained by evaluating parenting though the subjective experiences of children (Barber, 2002; Morris et. al, 2002). Yet, the perceptions of students may not reflect the perceptions of parents. Future research may benefit from including one or both parents in order to understand the motivations and priorities of parents with the over-involved style of parenting.

Third, the correlational nature of the results cannot provide causal evidence regarding helicopter parenting. Thus, conducting experimental and longitudinal studies to isolate the actual cause of negative outcomes among adult children would be beneficial. Moreover, future research also may include experimental interventions which may support or negate the idea of helicopter parenting having a causal effect on college student adjustment.

Finally, future research is needed to clearly define and validate the construct of helicopter parenting and determine the mechanism through which helicopter parenting influences college adjustment. Previous research has shown that helicopter parenting is distinct from behavioral and psychological control (Padilla-Walker & Nelson, 2012) and is on the responsiveness and the demandingness continuum (Odenweller, Booth-Butterfield, & Weber, 2014; Segrin, Woszidlo, Givertz, Bauer, & Taylor Murphy, 2012). Yet, it is still difficult to know what behaviors constitute helicopter parenting (e.g., parent calling a professor to discuss a test grade, parents hiring interior decorators for dorm rooms, parents complaining to administrators about instructors, parents following children to class or monitoring computer use to ensure academic responsibilities are met, parents telling children what classes to take during which semester and at what time) and how different individuals may categorize the same behavior (e.g., protection, discipline, teaching functional independence) differently. Using two or more of the published measures on helicopter parenting in concert may determine which items best captures the concept of helicopter parenting and forms the best measure of the helicopter parenting construct.

Additionally, researching the mechanisms through which helicopter parenting is related to college adjustment may provide insight into predicting and addressing the negative outcomes of helicopter parenting. The present study explored EI has a potential mediator and found that although EI did not mediate the relationship between helicopter parenting and college

adjustment, EI's influence on college adjustment was greater than the influence of helicopter parenting on college adjustment. Future research may wish to explore the interaction effects of EI with other personality traits or other individual factors important for college adjustment as potential mediators, such as self-efficacy (Credé & Niehorster, 2012; e.g., academic, social, and coping) and locus of control (Credé & Niehorster, 2012), as well as, factors that have been shown as aspects of or associated with helicopter parenting, such as perceived autonomy (Padilla-Walker & Nelson, 2012; Schiffrin et al., 2014).

## **Clinical Implications**

The results of this study have implications for psychologists working in college counseling centers. The findings of this study indicate that helicopter parenting has a negative influence on adjustment to college and that EI has a stronger positive influence on college adjustment. Psychologists who work with students in individual counseling who experience college adjustment distress may want to assess the students' current parental relationships and tailor therapeutic interventions based on the students' perceptions of their parents. If students perceive their parents as being over-involved in their lives, students may have positive and/or negative reactions to their parents' intrusive behavior. It will be important for psychologists to provide emotional support through the counseling relationship and include emotion-focused knowledge and skills (e.g., appropriate expression, regulation, and coping) in the counseling process to assist students with decreasing their adjustment distress in the context of their parental relationships.

In addition, because psychologists respect culture, working with college students who perceive their parents as appropriately involved in their lives despite parental behavior that some might consider to fall within the helicopter parenting domain requires identifying ways to assist students that are consistent with their cultural values. As such, clinicians and researchers alike

should explore how students can build skills to reduce the presence of negative outcomes that were found to correlate with helicopter parenting in the present study. For example, clinicians and researchers may work to identify ways to foster increased autonomy, social involvement in college, and college attachment without working to alter the behavior of parents. In addition, exploring how students feel when parents are overinvolved may help identify a need for the adult child to alter how they relate to the parent. When adult children express negative cognitions related to overinvolved parenting (e.g., "I cannot figure things out on my own", "I have to have help", "my parents don't trust me"), it may be possible to help the adult child develop strategies that keep parents involved but place the responsibility on the child (e.g., seeking parental advice but asserting the desire to take action independently). In addition, assisting students in better understanding their emotional responses may be particularly beneficial (given the strong positive relationship between EI and college adjustment in the present study).

Further, college counseling services are often underutilized (Nordberg, Hayes, McAleavey, Castonguay, & Locke, 2013); therefore, psychologists' roles outside of the counseling center are equally important. Mental health education and outreach to the campus community are opportunities to address ways in which parents and students can adjust to changes in their relationship and the ways students can be successful in college. Additionally, psychologists can advise university administrators about programs and policies that can promote adjustment and advise faculty and staff on how to identify students who may be experiencing distress, as well as, how to handle parents who inappropriately intervene on their children's behalf.

## **Conclusions**

The findings of this study offer meaningful insights into the concept of helicopter parenting and its influence on college student children outcomes. Permissiveness, which often

leads to negative outcomes in children, was associated with increased levels of helicopter parenting. In addition, when controlling for other types of parenting behaviors, authoritarianism was also associated with helicopter parenting. Considering the past research (e.g., authoritarianism associated with increased levels of helicopter parenting) and the results of the present study, it is likely that helicopter parenting is a unique pattern of basic parenting dimensions where parents provide high levels warmth and support while maintaining an inappropriate level of control of their children's actions. Additionally, the results revealed that higher helicopter parenting is most strongly associated with parents' lack of autonomy support, which is an indication that children of overinvolved parents seek parents' help when needed and are satisfied with the help that they receive despite perceiving their parents as less understanding, less accepting, and not supportive of their autonomy.

The results of the study also showed that higher levels of helicopter parenting predicted lower levels of college adjustment, which may lead to a decrease in students' college performance and retention. EI had a negative relationship with helicopter parenting and a positive relationship with college adjustment; however, EI was not the mechanism through which helicopter parenting related to college adjustment and the relationship between helicopter parenting and adjustment to college did not differ as a function of EI. The results demonstrated that EI had a greater positive influence in students' adjustment to college than did the negative influence of their parents' over-involvement. The results taken together provide support for noncognitive skills in college preparation activities, campus-wide interventions related to emotion-centered knowledge and skills for college students, and emotion-focused clinical interventions.

#### References

- Abar, B., Carter, K. L., & Winsler, A. (2009). The effects of maternal parenting style and religious commitment on self-regulation, academic achievement, and risk behavior among African-American parochial college students. *Journal of Adolescence*, *32*, 259-273. doi:10.1016/j.adolescence.2008.03.008
- Ainsworth, M., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M. D. S., & Bowlby, J. (1991). An ethological approach to personality development.

  \*American Psychologist, 46(4), 331-341.
- Alarcon, G. M., & Edwards, J. M. (2013). Ability and motivation: Assessing individual factors that contribute to university retention. *Journal of Educational Psychology*, 105, 129-137. doi:10.1037/a0028496
- Alegre, A. (2011). Parenting styles and children's emotional intelligence: What do we know? [Abstract]. *The Family Journal*, 19(1), 56-62.
- Alegre, A., & Benson, M. J. (2010). Parental behaviors and adolescent adjustment: Mediation via adolescent trait emotional intelligence. *Individual Differences Research*, 8(2), 83-96.
- Alvan, S., Belgrave, F. Z., & Zea, M. (1996). Stress, social support, and college adjustment among Latino students. *Cultural Diversity and Mental Health*, 2, 193-203. doi:10.1037/1099-9809.2.3.193
- Anglin, D. M., & Wade, J. C. (2007). Racial socialization, racial identity, and Black students' adjustment to college. *Cultural Diversity and Ethnic Minority Psychology*, *13*, 207-215. doi:10.1037/1099-9809.13.3.207

- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment:

  Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16, 427-454. doi:10.1007/BF02202939
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*, 469–480. doi:10.1037/0003-066X.55.5.469
- Austin, E. J., Saklofske, D. H., Huang, S. H., & McKenney, D. (2004). Measurement of trait emotional intelligence: Testing and cross-validating a modified version of Schutte et al.'s (1998) measure. *Personality & Individual Differences*, *36*, 555. doi:10.1016/S0191-8869(03)00114-4
- Baker, R., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, *31*, 179-189. doi:10.1037/0022-0167.31.2.179.
- Baker, R. W., & Siryk, B. (1999). Student Adaptation to College Questionnaire (SACQ) manual.

  Los Angeles, CA: Western Psychological Services.
- Baker, T. R. (2008). Navigating state and federal student privacy laws to design educationally sound parental notice policies. *New Directions for Student Services*, 122, 81-103. doi:10.1002/ss.277
- Barber, B. K. (2002). Intrusive parenting: How psychological control affects children and adolescents. Washington, D.C.: American Psychological Association.
- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior.

  Genetic Psychology Monographs, 75(1), 43-88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology*Monographs, 4(1), 1-103.

- Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83–96. doi:10.2307/1129836
- Berzenski, S. R., & Yates, T. M. (2013). Preschoolers' emotion knowledge and the differential effects of harsh punishment. *Journal of Family Psychology*, 27, 463-472. doi:10.1037/a0032910
- Bester, M., Jonker, C. S., & Nel, J. (2013). Confirming the factor structure of the 41-item version of the Schutte Emotional Intelligence Scale. *Journal of Psychology in Africa*, 23(2), 213-222.
- Bhochhibhoya, A., Branscum, P., Taylor, E., & Hofford, C. (2014). Exploring the relationships of physical activity, emotional intelligence, and mental health among college students.

  \*American Journal of Health Studies\*, 29(2), 191-198.
- Blickle, G., Momm, T., Liu, Y., Witzki, A., & Steinmayr, R. (2011). Construct validation of the Test of Emotional Intelligence (TEMINT): A two-study investigation. *European Journal of Psychological Assessment*, 27, 282-289. doi:10.1027/1015-5759/a000075
- Boone, M. S., Edwards, G. R., Haltom, M., Hill, J. S., Liang, Y., Mier, S. R., & ... Yau, T.

  (2011). Let's talk: Getting out of the counseling center to serve hard-to-reach students. *Journal of Multicultural Counseling and Development*, 39, 194-205. doi:10.1002/j.2161-1912.2011.tb00634.x
- Bowlby, J. (1973). Attachment and loss: Vol. 2. Separation—anxiety and anger. New York, NY: Basic Books.
- Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development.

  New York, NY: Basic Books.

- Buckley, M., Storino, M., & Saarni, C. (2003). Promoting emotional competence in children and adolescents: Implications for school psychologists. *School Psychology Quarterly*, *18*, 177-191. doi:10.1521/scpq.18.2.177.21855
- Buri, J.R. (1991). Parental Authority Questionnaire, *Journal of Personality and Social Assessment*, 57(1), 110-119.
- Chao, R. K. (2001). Extending research on the consequences of parenting style for Chinese Americans and European Americans. *Child Development*, 72(6), 1832-1843.
- Chapman, B. P., & Hayslip, B. r. (2005). Incremental validity of a measure of emotional intelligence. *Journal of Personality Assessment*, 85, 154-169. doi:10.1207/s15327752jpa8502\_08
- Chickering, A. W., & Reisser, L. (1993). *Education and Identity*. (2nd ed.) San Francisco, CA: Jossey-Bass.
- Claros, E., & Sharma, M. (2012). The relationship between emotional intelligence and abuse of alcohol, marijuana, and tobacco among college students. *Journal of Alcohol and Drug Education*, 56(1), 8-37.
- Cline, F. W., & Fay, J. (1990). *Parenting with love and logic: Teaching children responsibility*.

  Colorado Springs, CO: Pinon Press.
- Cohen, R. J. & Swerdlik, M. E. (2005). *Psychological testing and assessment: An introduction to tests and measurement.* (6<sup>th</sup> ed.). New York, NY: McGraw-Hill.
- Conley, C. S., Travers, L. V., & Bryant, F. B. (2013). Promoting psychosocial adjustment and stress management in first-year college students: The benefits of engagement in a psychosocial wellness seminar. *Journal of American College Health*, 61, 75-86. doi:10.1080/07448481.2012.754757

- Cook, E. C., Buehler, C., & Fletcher, A. C. (2012). A process model of parenting and adolescents' friendship competence. *Social Development*, 21, 461-481. doi:10.1111/j.1467-9507.2011.00642.x
- Costa, P. T., Jr., & McCrae, R. R. (2003). *NEO Five-Factor Inventory (NEO-FFI), Form S* (College Age). Lutz, FL: Psychological Assessment Resources.
- Credé, M., & Niehorster, S. (2012). Adjustment to College as Measured by the Student

  Adaptation to College Questionnaire: A Quantitative Review of its Structure and

  Relationships with Correlates and Consequences. *Educational Psychology Review*, 24,

  133-165. doi:10.1007/s10648-011-9184-5
- Dacre Pool, L., & Qualter, P. (2012). Improving emotional intelligence and emotional self-efficacy through a teaching intervention for university students. *Learning & Individual Differences*, 22, 306-312. doi:10.1016/j.lindif.2012.01.010
- Dahmus, S., & Bernardin, H. J. (1992). Student adaptation to college questionnaire.

  Measurement & Evaluation in Counseling & Development, 25(3), 139-142.
- DeFranc, W., & Mahalik, J. R. (2002). Masculine gender role conflict and stress in relation to parental attachment and separation. *Psychology of Men & Masculinity*, *3*, 51-60. doi:10.1037/1524-9220.3.1.51
- Domitrovich, C. E., Cortes, R. C., & Greenberg, M. T. (2007). Improving young children's social and emotional competence: A randomized trial of the preschool 'PATHS' curriculum. *The Journal of Primary Prevention*, 28, 67-91. doi:10.1007/s10935-007-0081-0
- Engels, R. E., Finkenauer, C., Meeus, W., & Dekovic, M. (2001). Parental attachment and adolescents' emotional adjustment: the associations with social skills and relational

- competence. *Journal of Counseling Psychology*, 48, 428-439. doi: 10.1037//O022-0167.48.4.428
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York, NY: Norton.
- Feldt, R. C., Graham, M., & Dew, D. (2011). Measuring adjustment to college: Construct validity of the Student Adaptation to College Questionnaire. *Measurement and Evaluation in Counseling and Development*, 44, 92-104. doi:10.1177/0748175611400291
- Fingerman, K. L., Cheng, Y., Wesselmann, E. D., Zarit, S., Furstenberg, F., & Birditt, K. S. (2012). Helicopter parents and landing pad kids: Intense parental support of grown children. *Journal of Marriage and Family*, *74*, 880-896. doi:10.1111/j.1741-3737.2012.00987.x
- Fischer, J. L., Forthun, L. F., Pidcock, B. W., & Dowd, D. A. (2007). Parent relationships, emotion regulation, psychosocial maturity and college student alcohol use problems.

  \*Journal of Youth and Adolescence\*, 36, 912–926. doi:10.1007/s10964-006-9126-6.
- Fuemmeler, B. F., Yang, C., Costanzo, P., Hoyle, R. H., Siegler, I. C., Williams, R. B., & Østbye, T. (2012). Parenting styles and body mass index trajectories from adolescence to adulthood. *Health Psychology*, *31*, 441-449. doi:10.1037/a0027927
- Fukuda, E., Saklofske, D. H., Tamaoka, K., Fung, T., Miyaoka, Y., & Kiyama, S. (2011). Factor structure of Japanese versions of two emotional intelligence scales. *International Journal of Testing*, 11, 71-92. doi:10.1080/15305058.2010.516379
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York, NY: Basic Books.
- Gardner, K. J., & Qualter, P. (2010). Concurrent and incremental validity of three trait emotional intelligence measures. *Australian Journal of Psychology*, 62(1), 5–13.

- Goleman, D. (1995). *Emotional Intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Goleman, D. (1998). Working with emotional intelligence. New York, NY: Bantam Books.
- Gonzalez, A. (2001). Undergraduate students' goal orientations and their relationship to perceived parenting styles. *College Student Journal*, *35*(2), 182-193.
- Gray, R., Vitak, J., Easton, E. W., & Ellison, N. B. (2013). Examining social adjustment to college in the age of social media: Factors influencing successful transitions and persistence. *Computers & Education*, 67, 193-207. doi:10.1016/j.compedu.2013.02.021
- Gregory P., H., & Garnet L., C. (2004). The predictive nature of humor, authoritative parenting style, and academic achievement on indices of initial adjustment and commitment to college among college freshmen. *Journal of College Student Retention: Research, Theory & Practice*, 6(2), 225-245.
- Grolnick, W. S., Kurowski, C. O., Dunlap, K. G., & Hevey, C. (2000). Parental resources and the transition to junior high. *Journal of Research on Adolescence*, *10*, 465–488. doi:10.1207/SJRA1004\_05.
- Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology*, 81, 143-154. doi:10.1037/0022-0663.81.2.143
- Grolnick, W. S., Ryan, R. M., & Deci, E. L. (1991). The inner resources for school performance:

  Motivational mediators of children's perceptions of their parents. *Journal of Educational Psychology*, 83, 508–517. doi:10.1037/0022-0663.83.4.508

- Guardia, J. R., & Evans, N. J. (2008). Student development in tribal colleges and universities.

  NASPA Journal (National Association of Student Personnel Administrators, Inc.), 45(2),
  237-264.
- Hardy, S. A., White, J. A., Zhang, Z., & Ruchty, J. (2011). Parenting and the socialization of religiousness and spirituality. *Psychology of Religion and Spirituality*, 3, 217-230. doi:10.1037/a0021600
- Harwood, R. L., Miller, J. G., & Irizarry, N. L. (1995). *Culture and attachment: Perceptions of the child in context*. New York: Guilford Press.
- Hayes, B., Freeman, M. S., Vogel, J. E., Clonch, M., Clarke, N., & Duffey, T. (2008).
   Destignatizing college counseling for first-year students: A psychodrama approach.
   Journal of College Student Development, 49, 250-254. doi:10.1353/csd.0.0009
- Heppner, P., & Neal, G. W. (1983). Holding up the mirror: Research on the roles and functions of counseling centers in higher education. *The Counseling Psychologist*, 11, 81-98. doi:10.1177/0011000083111014
- Hetherington, E., & Parke, R. D. (1999). *Child Psychology: A Contemporary Viewpoint*. Boston, MA: McGraw-Hill College.
- Hickman, G., Bartholomae, S., & McKenry, P. (2000). Influence of parenting style on the adjustment and academic achievement of traditional college freshmen. *Journal of College Student Development*, 41(1), 41–54.
- Hickman, G. P., Toews, M. L., & Andrews, D. W. (2001). The differential influence of authoritative parenting on the initial adjustment of male and female traditional college freshman. *Journal of the First-Year Experiences & Students in Transition*, 13(1), 23-46.

- Johnson, V. K., Gans, S. E., Kerr, S., & Deegan, K. (2008). Managing the transition to college:

  The role of family cohesion and adolescents' emotional coping strategies. *The Journal of College Orientation and Transition*, 15(1), 29-46.
- Johnson, V., Gans, S. E., Kerr, S., & LaValle, W. (2010). Managing the transition to college:

  Family functioning, emotion coping, and adjustment in emerging adulthood. *Journal of College Student Development*, *51*, 607-621. doi:10.1353/csd.2010.0022
- Joseph, D. L., Jin, J., Newman, D. A., & O'Boyle, E. H. (2014). Why does self-reported emotional intelligence predict job performance? A meta-analytic investigation of mixed EI. *Journal of Applied Psychology*. Advance online publication. doi:10.1037/a0037681
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, 95, 54-78. doi:10.1037/a0017286
- Judge, T. A., Erez, A., Bono, J. E., & Thoresen, C. J. (2002). Are measures of self-esteem, neuroticism, locus of control, and generalized self-efficacy indicators of a common core construct? *Journal of Personality and Social Psychology*, 83, 693-710. doi:10.1037/0022-3514.83.3.693
- Keaten, J., & Kelly, L. (2007). Emotional intelligence as a mediator of family communication patterns and reticence. *Communication Reports*, 20(1-2), 104-116.
- Keller, H. (2003). Socialization for competence: Cultural models of infancy. *Human Development*, 46, 288–311
- Kenny, M. E. (1987). The extent and function of parental attachment among first-year college students. *Journal of Youth and Adolescence*, *16*, 17–29. doi: 10.1007/BF02141544
- Kenny, M. E. (1990). College seniors' perceptions of parental attachments: The value and stability of family ties. *Journal of College Student Development*, *3*(1), 39-46.

- Kenny, M. E., & Donaldson, G. A. (1991). Contributions of parental attachment and family structure to the social and psychological functioning of first-year college students. *Journal of Counseling Psychology*, 38, 479-486. doi:10.1037/0022-0167.38.4.479
- Kerr, M., Stattin, H., & Özdemir, M. (2012). Perceived parenting style and adolescent adjustment: Revisiting directions of effects and the role of parental knowledge.

  \*Developmental Psychology, 48, 1540-1553. doi:10.1037/a0027720
- Kessler, R. C., Foster, C. L., Saunders, W. B., & Stang, P. E. (1995). Social consequences of psychiatric disorders, I: Educational attainment. *The American Journal of Psychiatry*, 152(7), 1026–1032.
- Klahr, A. M., & Burt, S. (2013). Elucidating the etiology of individual differences in parenting:

  A meta-analysis of behavioral genetic research. *Psychological Bulletin*, *140*, 544-586.

  doi:10.1037/a0034205
- Klein, M. B., & Pierce, J. r. (2009). Parental care aids, but parental overprotection hinders, college adjustment. *Journal of College Student Retention: Research, Theory and Practice*, 11, 167-181. doi:10.2190/CS.11.2.a
- Kotsou, I., Nelis, D., Grégoire, J., & Mikolajczak, M. (2011). Emotional plasticity: Conditions and effects of improving emotional competence in adulthood. *Journal of Applied Psychology*, *96*, 827-839. doi:10.1037/a0023047
- Kraft, David P. (2009). *Mens Sana:* The growth of mental health in the American college health association. *Journal of American College Health*, 58, 267-275. doi:10.1080/07448480903297546

- Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development*, 54, 247-266. doi:10.1353/csd.2013.0034
- LaBrie, J. W., Ehret, P. J., Hummer, J. F., & Prenovost, K. (2012). Poor adjustment to college life mediates the relationship between drinking motives and alcohol consequences: A look at college adjustment, drinking motives, and drinking outcomes. *Addictive Behaviors*, *37*, 379-386. doi:10.1016/j.addbeh.2011.11.018
- Lapsley, D. K., Rice, K. G., & Shadid, G. E. (1989). Psychological separation and adjustment to college. *Journal of Counseling Psychology*, *36*, 286-294. doi:10.1037/0022-0167.36.3.286
- Leedy, G. M., & Smith, J. E. (2012). Development of emotional intelligence in first-year undergraduate students in a frontier state. *College Student Journal*, 46(4), 795-804.
- LeMoyne, T., & Buchanan, T. (2011). Does "hovering" matter? Helicopter parenting and its effect on well-being. *Sociological Spectrum*, *31*, 399-418. doi:10.1080/02732173.2011.574038
- Locke, J. Y., Campbell, M. A., & Kavanagh, D. (2012). Can a parent do too much for their child? An examination by parenting professionals of the concept of overparenting.

  Australian Journal of Guidance & Counselling, 22, 249-265. doi:10.1017/jgc.2012.29
- Love, K. M., & Thomas, D. M. (2014). Parenting styles and adjustment outcomes among college students. *Journal of College Student Development*, *55*, 139-150. doi:10.1353/csd.2014.0013
- Maccoby, E. E., & Martin, J. A. (1983). Socialization in the context of the family: Parent–child interaction. In P. H. Mussen & E. M. Hetherington (Eds.), *Handbook of child psychology:*

- Vol. 4. Socialization, Personality, and Social Development (4th ed; pp. 1–101). New York, NY: Wiley
- Marmarosh, C. L., & Markin, R. D. (2007). Group and personal attachments: Two is better than one when predicting college adjustment. *Group Dynamics: Theory, Research, and Practice*, 11, 153-164. doi:10.1037/1089-2699.11.3.153
- Mattanah, J.F., Hancock, G. R., & Brand, B. L. (2004). Parental attachment, separation-individuation, and college student adjustment: A structural equation analysis of mediational effects. *Journal of Counseling Psychology*, *51*, 213-225. doi:10.1037/0022-0167.51.2.213
- Mattanah, J. F., Lopez, F. G., & Govern, J. M. (2011). The contributions of parental attachment bonds to college student development and adjustment: A meta-analytic review. *Journal of Counseling Psychology*, 58, 565-596. doi:10.1037/a0024635
- Mayer, J. D., Caruso, D. R., & Salovey, P. (1999). Emotional intelligence meets traditional standards for an intelligence. *Intelligence*, 27, 267-298. doi:10.1016/S0160-2896(99)00016-1
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications*. New York: Basic Books.
- McCarthy, T. (2014). Great aspirations: The postwar American college counseling center.

  History of Psychology, 17, 1-18. doi:10.1037/a0035671
- McKinney, C., Milone, M., & Renk, K. (2011). Parenting and late adolescent emotional adjustment: Mediating effects of discipline and gender. *Child Psychiatry and Human Development*, 42, 463-481. doi:10.1007/s10578-011-0229-2

- McKinney, C., & Power, L. (2012). Childhood playtime, parenting, and psychopathology in emerging adults: Implications for research and play therapists. *International Journal of Play Therapy*, 21, 215-231. doi:10.1037/a0029172
- Melendez, M., & Melendez, N. (2010). The influence of parental attachment on the college adjustment of White, Black, and Latina/Hispanic women: A cross-cultural investigation.

  \*Journal of College Student Development, 51, 419-435. doi:10.1353/csd.0.0144
- Minuchin, S. (1974). Families and family therapy. Cambridge, MA: Harvard University Press.
- Morris, A. S., Steinberg, L., Sessa, F. M., Avenevoli, S., Silk, J. S., & Essex, M. J. (2002).
   Measuring children's perceptions of psychological control: developmental and conceptual considerations. In B. K. Barber (Ed.), *Psychological control of children and adolescents*. (pp. 125–159). Washington, D.C.: American Psychological Association.
- Mothersead, P. K., Kivlighan, D. r., & Wynkoop, T. F. (1998). Attachment, family dysfunction, parental alcoholism, and interpersonal distress in late adolescence: A structural model.

  \*Journal of Counseling Psychology, 45, 196-203. doi:10.1037/0022-0167.45.2.196
- Nordberg, S. S., Hayes, J. A., McAleavey, A. A., Castonguay, L. G., & Locke, B. D. (2013).

  Treatment utilization on college campuses: Who seeks help for what? *Journal of College Counseling*, 16(3), 258-274.
- Nosko, A., Tieu, T., Lawford, H., & Pratt, M. W. (2011). How do I love thee? Let me count the ways: Parenting during adolescence, attachment styles, and romantic narratives in emerging adulthood. *Developmental Psychology*, 47, 645-657. doi:10.1037/a0021814
- Odenweller, K. G., Booth-Butterfield, M., & Weber, K. (2014). Investigating helicopter parenting, family environments, and relational outcomes for millennials. *Communication Studies*, 65, 407-425. doi:10.1080/10510974.2013.811434

- Padilla-Walker, L. M., & Nelson, L. J. (2012). Black hawk down?: Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging adulthood. *Journal of Adolescence*, *35*, 1177-1190. doi:10.1016
- Parker, G., Tupling, H., & Brown, L. B. (1979). Parental bonding instrument. *British Journal of Medical Psychology*, 52, 1-10.
- Patock-Peckham, J. A., & Morgan-Lopez, A. A. (2007). College drinking behaviors: Mediational links between parenting styles, parental bonds, depression, and alcohol problems.

  \*Psychology of Addictive Behaviors, 21, 297-306. doi:10.1037/0893-164X.21.3.297
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence.

  \*Personality and Individual Differences, 29, 313–320. doi:10.1016/S0191-8869(99)00195-6
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891.
- Ratelle, C. F., Larose, S., Guay, F., & Senécal, C. (2005). Perceptions of parental involvement and support as predictors of college students' persistence in a science curriculum. *Journal of Family Psychology*, *19*, 286-293. doi:10.1037/0893-3200.19.2.286
- Rice, K. G. (1992). Separation-individuation and adjustment to college: A longitudinal study. *Journal of Counseling Psychology*, *39*, 203-213. doi:10.1037/0022-0167.39.2.203
- Rice, K. G., Cunningham, T. J., & Young, M. B. (1997). Attachment to parents, social competence, and emotional well-being: A comparison of Black and White late adolescents. *Journal of Counseling Psychology*, 44, 89–101.

- Riley, H., & Schutte, N. S. (2003). Low emotional intelligence as a predictor of substance-use problems. *Journal of Drug Education*, *33*(4), 391-398. doi:10.2190/6DH9-YT0M-FT99-2X05
- Rivers, S. E., Brackett, M. A., Omori, M., Sickler, C., Bertoli, M. C., & Salovey, P. (2013).

  Emotion skills as a protective factor for risky behaviors among college students. *Journal of College Student Development*, *54*, 172-183. doi:10.1353/csd.2013.0012
- Saklofske, D. H., Austin, E. J., & Minski. P. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences*, *34*, 707–721. doi:10.1016/S0191-8869(02)00056-9
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211.
- Savage, M. & Petree, C. (2011). National survey of college and university parent programs. *The Association of Higher Education Parent/Family Program Professionals*, University of Minnesota.
- Schaefer, E. S. (1965). Children's reports of parental behavior: An inventory. *Child Development*, *36*(2), 413-424.
- Schiffrin, H. H., Liss, M., Miles-McLean, H., Geary, K. A., Erchull, M. J., & Tashner, T. (2014).

  Helping or hovering? The effects of helicopter parenting on college students' well-being. *Journal of Child and Family Studies*, 23, 548-557. doi:10.1007/s10826-013-9716-3
- Schnuck, J., & Handal, P. J. (2011). Adjustment of college freshmen as predicted by both perceived parenting style and the five factor model of personality. *Psychology*, 2, 275-282. doi:10.4236/psych.2011.24044

- Schutte, N. S., & Malouff, J. M. (2002). Incorporating emotional skills content in a college transition course enhances student retention. *Journal of the First-year Experience* & Students in Transition, 14(1), 7-21.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25, 167–177. doi:10.1016/S0191-8869(98)00001-4
- Seal, C. R., Naumann, S. E., Scott, A. N., & Royce-Davis, J. (2011). Social emotional development: A new model of student learning in higher education. *Research in Higher Education Journal*, *10*, 101-113. Retrieved from http://www.aabri.com/rhej.html
- Sedlacek, W. E., & Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and noncognitive variables. *Journal of Counseling & Development*, 70(6), 724-727.
- Segrin, C., Woszidlo, A., Givertz, M., Bauer, A., & Taylor Murphy, M. (2012). The association between overparenting, parent-child communication, and entitlement and adaptive traits in adult children. *Family Relations*, *61*, 237-252. doi:10.1111/j.1741-3729.2011.00689.x
- Somers, P., & Settle, J. (2010a). The helicopter parent part 1: Research toward a typology.

  \*College and University: The Journal of the American Association of Collegiate

  \*Registrars, 86(1), 18–27.
- Somers, P., & Settle, J. (2010b). The helicopter parent part 2: International arrivals and departures. *College and University: The Journal of the American Association of Collegiate Registrars*, 86(2), 2-9.

- Soucy, N., & Larose, S. (2000). Attachment and control in family and mentoring contexts as determinants of adolescent adjustment at college. *Journal of Family Psychology*, *14*, 125-143. doi:10.1037/0893-3200.14.1.125
- Sparkman, L. A., Maulding, W. S., & Roberts, J. G. (2012). Non-cognitive predictors of student success in college. *College Student Journal*, 46(3), 642-652.
- Stefanou, C., Stolk, J. D., Prince, M., Chen, J. C., & Lord, S. M. (2013). Self-regulation and autonomy in problem- and project-based learning environments. *Active Learning in Higher Education*, *14*, 109-122. doi:10.1177/1469787413481132
- Strage, A., & Brandt, T. (1999). Authoritative parenting and college students' academic adjustment and success. *Journal of Educational Psychology*, 91, 146-156. doi:10.1037/0022-0663.91.1.146
- Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development*, *17*(1), 183-209.
- Thorndike, E.L. (1920). Intelligence and its use. *Harper's Magazine*, 140, 227-235
- Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition. Chicago, IL: University of Chicago Press.
- Triandis, H. C. (2000). Culture and conflict. *International Journal of Psychology*, 35, 145–152.
- U.S. Department of Education, Office of Family Policy Compliance. *Family Education Rights*and Privacy Act (FERPA). Retrieved October 21, 2014 from

  http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html

- Vivona, J. (2000). Parental attachment styles of late adolescents: Qualities of attachment relationships and consequences for adjustment. *Journal of Counseling Psychology*, 47, 316-329. doi:10.1037/0022-0167.47.3.316.
- Wintre, M. G., & Yaffe, M. (2000). First-year student's adjustment to university life as a function of relationships with parents. *Journal of Adolescent Research*, 15(1), 9-37.
- Zarit, S.H., & Eggebeen, D. J. (2002). Parent-child relationships in adulthood and later years. In
  M.H. Borstein's (Ed.) *Handbook of Parenting Vol. 1: Children and Parenting*. (2nd ed).
  Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc., Publishers.
- Zeifman, D., & Hazan, C. (2008). Pair bond as attachment: Reevaluating the evidence. In J. Cassidy & P. R. Shaver's (Eds.) *Handbook of Attachment: Theory, Research, and Clinical Application* (2nd ed). New York, NY: The Guilford Press
- Zijlmans, L. M., Embregts, P. M., Gerits, L. L., Bosman, A. T., & Derksen, J. L. (2014). The effectiveness of staff training focused on increasing emotional intelligence and improving interaction between support staff and clients [Abstract]. *Journal of Intellectual Disability Research*. Advance online publication. doi:10.1111/jir.12164

## Appendix A

#### Recruitment Email

Subject: Research Invitation and Chance to Win \$20 from Amazon.com

Dear Student,

I am a doctoral student in the Department of Special Education, Rehabilitation, and Counseling at Auburn University. I would like to invite you to participate in my research study to gain understanding of college adjustment, and how your experiences with your parent and your emotion-based experiences may relate to the college experiences of first-year students. You may participate if you were a first-year college student (freshman) for the first time and enrolled full-time during fall semester 2014.

Participants will be asked to respond to an online questionnaire regarding their college experiences, feelings, and family-related experiences. Your total time commitment will be approximately 35 minutes.

Your information will be collected anonymously and will not be identifiable. As an incentive to participate, you will be offered the chance to enter a drawing for one of four \$20 e-gift cards from Amazon.com.

If you would like to know more information about this study, an information letter can be obtained by clicking (or copying and pasting into your web browser) the following link: <a href="https://auburn.qualtrics.com/SE/?SID=SV\_brP7A9S7LwAMJvf">https://auburn.qualtrics.com/SE/?SID=SV\_brP7A9S7LwAMJvf</a>

If you decide to participate after reading the letter, you can access the survey from a link in the letter.

If you have any questions, please contact me at cdb0015@auburn.edu or my advisor, Dr. Annette Kluck at ask0002@auburn.edu.

Thank you for your consideration,

Chenetra D. Buchannon, MAE Doctoral Candidate, Counseling Psychology Auburn University, AL cdb0015@auburn.edu

## Appendix B

#### Consent Form

You are invited to participate in a research study to gain understanding of college experiences, and how perceived parenting and emotional experiences may relate to those college experiences of first-year students. The study is being conducted by Chenetra Buchannon, doctoral candidate, under the direction of Dr. Annette S. Kluck, associate professor in the Auburn University Department of Special Education, Rehabilitation, and Counseling. You are invited to participate because you identify as a first-year college student.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to respond to an online questionnaire regarding your college experiences and family-related experiences. Your total time commitment will be approximately 35 minutes. You do not have to complete the survey at one time. You can return to the survey by clicking on the survey link again within one week.

Are there any risks or discomforts? The risk associated with participating in this study is potential discomfort in answering the questions if you are experiencing family relational problems or difficulty adjusting to college. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. A list of available resources will be provided to you when you have completed the study or when you choose to withdraw from the study.

Are there any benefits to yourself or others? If you participate in this study, you can expect to contribute to knowledge about perceived parenting and emotional intelligence among first-year college students and the influences of students' overall college experience. I cannot promise you that you will receive any or all of the benefits described.

**Will you receive compensation for participating?** To thank you for your time you will be offered the chance to enter a drawing for one of four \$20 gift cards from Amazon.com. After data collection is completed, the drawing will be conducted. Winners will receive an e-gift card via e-mail.

If you change your mind about participating, you can withdraw at any time by closing your browser window. If you choose to withdraw, your data can be withdrawn as long as it is identifiable. Once you have submitted anonymous data, it cannot be withdrawn since it will be unidentifiable. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the Department of Special Education, Rehabilitation, and Counseling.

Any data obtained in connection with this study will remain confidential. Your information will be collected by an anonymous web browser that does not record your email address, internet protocol address, or any other identifiable information. Your data will be stored on a secure server approved by Auburn University with access granted only to researchers involved in this study. Information collected through your participation may be shared with the First Year

Experience Office at Auburn University, presented at a professional meeting, and/or published in a professional journal.

**If you have questions about this study,** please contact Chenetra Buchannon at (334) 707-7362 or cdb0015@auburn.edu or Dr. Annette Kluck at (334) 844-2553 or ask0002@auburn.edu.

**If you have questions about your rights as a research participant,** you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at <a href="mailto:IRBadmin@auburn.edu">IRBadmin@auburn.edu</a> or <a href="mailto:IRBChair@auburn.edu">IRBChair@auburn.edu</a>.

## Appendix C

## Demographics Questionnaire

# The following demographics were used to determine eligibility for participation:

During the fall semester 2014, what was your classification (i.e., year in college)? □First Year Student and first time attending college (Freshman at Auburn University) □Freshman Transfer Student (transferred from another college or university to Auburn University) □Sophomore □Junior □Senior □Graduate/Professional Student
During the fall semester 2014, what was your enrollment status?  □Full-time student  □Part-time student  □Less than part-time student  □Not enrolled  □Other, please specify
Ethnicity  African American/Black  American Indian/Native American  Asian American /Pacific Islander  Biracial/Multiracial  Caucasian/European American  International Student  Latina/Latino/Hispanic American  Other, please specify
If students were eligible to participate, they answered the following questions:
Age □Younger than 17 □17 □18 □19 □Older than 19
Sex □Female □Male □Other, please specify

During the fall semester 2014, where di  ☐On campus ☐Off campus with parents ☐Off campus with roommates ☐Off campus, living alone ☐Other, please specify	id you live?
live) to your college address by car/auto	as your travel time from home (place where your parent(s) omobile)? hoose the parent with whom you lived one year prior to
For spring semester 2015, what was yo     First Year Student (Second semester I     Freshman Transfer Student (transferre university)     Sophomore     Junior     Senior     Graduate/Professional Student	
For spring semester 2015, what was yo   Full-time student  Part-time student  Less than part-time student  Not enrolled  Other, please specify	ur enrollment status?
For spring semester 2015, where did yo □On campus □Off campus with parents □Off campus with roommates □Off campus, living alone □Other, please specify	ou live?
live) to your college address by car/auto	ur travel time from home (place where your parent(s) omobile)? hoose the parent with whom you lived one year prior to

□5-8 hours
□9 hours or more
□Other, please specify
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Intentions to Return to College
□I intend to return to/enroll in courses at my current 4-year college or university for the next
term (not including the summer term)
□ I intend to transfer to another 4-year college or university for the next term (not including the
summer term)
□I intend to transfer to a 2-year college or community college for the next term (not including
the summer term)
□I intend to leave college to enlist in military services/armed forces
□I intend to leave college to find employment
□I have not decided if I will return to college for the next term (not including the summer term)
□Other, please specify
Please answer the following questions about the parent that you talk to most frequently (chose
one parent/parent-figure).
I will be answering questions about:
□Biological mother
□Stepmother
□Adopted mother
□Foster mother
Biological father
□Stepfather
□Adopted father
□Foster father
□Female close relative
□Male close relative
□Other, please specify
Age of your parent:
□Younger than 19
□19-25
$\Box 26-35$
$\Box 36-45$
$\Box 46-55$
□56-65
□Older than 65
Highest education completed by my parent:
Highest education completed by my parent:
□Less than high school
□High school diploma or GED
□Bachelor's degree
□Master's degree

□Doctoral degree □I do not know the education of my parent
and not know the education of my parent
Relationship status of my parent:
□Single
□In a relationship with a romantic partner
□In a civil union or domestic partnership
□Married to my biological mother
□Married to my stepmother
□Married to my adopted mother
□Married to my foster mother
□Married to my biological father
□Married to my stepfather
□Married to my adopted father
□Married to my foster father
□Divorced
□Widowed
□Other, please specify
Combined income for my parents
□Less than \$10,000
$\Box$ \$10, 001 $-$ \$25,000
$\Box$ \$ 25,001 $-$ \$40,000
□\$40,001 – \$75,000
$\Box $75,001 - $100,000$
□More than \$100,000
$\Box I$ do not know the combined income of my parent(s).