Parental involvement during college: student perceptions and relationship with college self-efficacy

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PARENTAL INVOLVEMENT DURING COLLEGE: STUDENT PERCEPTIONS AND RELATIONSHIP WITH COLLEGE SELF-EFFICACY

by

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A Dissertation
Submitted to the University at Albany, State University of New York
in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy

School of Education
Department of Educational and Counseling Psychology

2017
Abstract

With advances in communication technology, reports of frequent parental contact among college students are on the rise. Anecdotal sources label this type of involved parenting as “helicopter” parenting, creating an image of parents who constantly “hover” over their children ready to solve all their problems and to monitor them. This study was designed to measure parental involvement, which includes positive as well as negative parental behaviors. The goals of the present study were: 1) to examine the specific parental involvement that college students experience, 2) explore students’ perceptions of such parenting, and 3) to investigate the relationship between parental involvement and college students’ self-efficacy. Results from self-report survey data from 154 undergraduates indicated that students and their parents communicated frequently and the students were happy with parental involvement. Parental involvement in undergraduates’ lives was mainly characterized by warmth, and support. Parental interventions, micromanagement, and control were virtually absent in the reports. Among students who reported higher parental involvement, a greater number perceived their parents to be caring, while fewer participants perceived their parents as controlling. Finally, parental involvement did not significantly predict college self-efficacy of participants. This study contributed to the limited existing research on parental involvement during college by proposing that such involvement could have potentially positive aspects for the students. Most of the participants solicit parental support, especially during stressful times, and consider parents to be a strong support system. Parental communication does not appear to be thrust upon students, but instead facilitates a connection between parents and children.
Acknowledgments

I would like to convey my deepest gratitude to my committee members for their patience and support, without which I would not be writing this today.

Dr. Joan Newman has always been supportive since the first time I spoke with her during my admissions process. Her consistent praise of my writing skills has encouraged and motivated me so much! I truly appreciate her meticulous and generous feedback during my dissertation journey. I would like to thank Dr. David Yun Dai for providing insightful perspectives on my study. His scholarship as a researcher has been instrumental in shaping my research. Dr. Kimberly Colvin’s methodological expertise has been invaluable. I want to thank her for providing precise, detailed, and timely feedback, especially during the last stages of my dissertation.

I also cannot go without thanking my colleague, Sijun Zhang, who collected data for this study. I cannot express how grateful I am to her, and I hope to help her in any way I can as she completes her doctoral studies. I would like to acknowledge all the instructors and students whose cooperation in data collection made this research possible.

My friends and colleagues, especially Dr. Weimiao Fan, Dr. Hamide Gözü, and Ji Eun Lee have motivated me in so many ways.

I would like to thank my family and especially my husband, Virendra, for his constant support and encouragement. My daughter Vidula continues to be a source of joy and inspiration.

Finally, I dedicate this dissertation to my Gurudev, Dr. Ashok Marathe, whose grace and compassion makes everything possible.
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Chapter 1: Introduction

Parenting during College

Across the nation, parental involvement on college campuses is on the rise (Daniel, Evans, & Scott, 2001; Pricer, 2008). Today’s college students, referred to as the “Millenials” (Pizzolato & Hicklen, 2011), tend to maintain frequent contact with their parents. Many college students and their parents communicate almost daily through media such as the cell phone and the internet (Gentzler, Oberhauser, Westerman, & Nadorff, 2011). This trend is popularly referred to as “Helicopter Parenting” whereby parents are imagined to hover over their children always ready to swoop in and protect them (Pricer, 2008). While there is no single scientific definition of the term (Padilla-Walker & Nelson, 2012), helicopter parenting is mainly a form of over-involved parenting which is developmentally unnecessary for young adult children. Such parenting involves frequent contact with the child, monitoring and micromanaging the child’s daily life and intervening in the academic, social and personal issues of the college-going child. In short, helicopter parenting can be characterized as continuing to parent the adult child in the same way as one would parent a younger child. Helicopter parenting, and its effects on college students, has been the subject of many news reports, some of them humorous, while others are serious (Guzman, 2005; LeTrent, 2013; Shaffer, 2010), yet only a small number of empirical studies has explored this phenomenon.

For the most part, research on parenting styles has focused on children and adolescents because college is traditionally a time when parents no longer “parent” their children. It has been considered a period of transition when most children move out of the parents’ home and have very little parental contact or involvement. But, as indicated earlier, this is changing. Parents of the Millenials are in some ways different from the parents of past generations. This new
generation of parents has been very involved in their children’s lives right from infancy (Daniel, Evans, & Scott, 2001). Schools have encouraged parents to do so for their children’s academic and personal development. The new generation of children also has mostly lived a very protected childhood and is accustomed to a high parental involvement in their lives. Some research indicates that helicopter parenting is higher among middle and upper class families (Wolf, Sax, & Harper, 2009). The parent-child dynamic, too, has changed and many college students consider their parents to be their close friends (Hofer & Moore, 2010). Technology is another powerful factor that has made its way into parenting, among other things in life. Today’s advanced technology enables people to communicate with each other no matter where they are or what they are doing. This makes it easy for parents and college students to stay in touch as frequently as they want.

Often, parents who are described as “helicopter” parents are portrayed as controlling parents who are unwilling to let go of their college-going child (Schiffrin et al., 2013). The cell phone has been called by names such as the electronic tether and the electronic umbilical cord (see Chen & Katz, 2009). Popular (Hofer & Moore, 2010) as well as empirical literature (Schiffrin et al., 2013) often gives the impression that the control exercised by helicopter parents is mainly authoritarian (see Baumrind, 1971) in nature. But some research suggests that helicopter parenting shares characteristics of authoritarian, authoritative, as well as permissive parenting (Padilla-Walker & Nelson, 2012; Segrin, Woszidlo, Ggivertz, & Montgomery, 2012). Padilla-Walker and Nelson proposed that helicopter parenting can be distinguished from other types of psychological and behavioral control. They found that even though helicopter parents attempted to control their children’s life and micromanage it, they also provided high levels of warmth, nurturance and guidance. As suggested earlier, helicopter parenting also seems to be an
extension of overprotective parenting. Overprotective behaviors on the parents’ part may stem from excessive responsiveness to the child’s needs – a characteristic of permissive parenting. Overprotective parenting, especially during adulthood, has been found to have negative outcomes for the children such as lack of autonomy (Cullaty, 2011; Padilla-Walker & Nelson, 2012), poor psychological well-being (LeMoyne & Buchanan, 2011), greater use of prescription medications for depression (LeMoyne & Buchanan, 2011; Schiffrin et al., 2013), and lower levels of school engagement (Padilla-Walker & Nelson, 2012).

Some researchers, however, have found some positive outcomes of parental involvement during college. For example, LaBrie and Cail (2011) found that mother-daughter contact moderated the influence of negative peer norms and was associated with less drinking in college. Lack of parental involvement during college has also been shown to have negative implications for first generation college students (Bryan & Simmons, 2009; McCarron & Inkelas, 2006) and for ethnic minority students (Bryan & Simmons, 2009)

**Perceptions of Parenting**

Research on parenting styles has shown that children’s perceptions of the parenting they received is an important determinant of the children’s psychosocial and educational outcomes (Grolnick, Ryan, & Deci, 1991; Li, Costanzo, & Putallaz, 2010), regardless of actual parental intentions behind their behaviors. For example, frequent check-ins by a concerned parent might be perceived as interference by the child. Similarly if a parent gives complete freedom to the child to make his or her own choices, it could be perceived as uncaring behavior by the child. As parenting during college years is an emerging phenomenon, published research on its perception is also in its infancy. In a review, Somers and Settle (2010) found only a few studies on this topic
and the results indicated that college students generally have a favorable attitude toward this type of parenting.

Popular reports as well as the available scientific literature portray the problematic nature of overparenting, including particularly “helicopter” parenting (as cited earlier) mainly from the viewpoint of professionals like college authorities, counselors, and researchers. Overall, the available literature seems to suggest that such overprotective and controlling parental behaviors have negative implications for the students’ sense of self in general (Cullaty, 2011; LeMoyne & Buchanan, 2011; Padilla-Walker & Nelson, 2012). The concern is that college students might become unable to function as independent adults due to developmentally inappropriate parental control. As college students’ perceptions of parenting are largely missing from the literature it is not known whether they coincide with scholarly or popular views of helicopter parenting. While some children may see these parental behaviors as controlling, others might consider them supportive and friendly. Parenting is not all about the parents, with adult children being mere recipients. It is quite possible that many adult children elicit these parental behaviors and perceive them favorably. Children’s perceptions about helicopter parenting need to be better understood, as this will help shed some light on the acceptability of this phenomenon for the children.

More specifically, it would be helpful to understand how college students perceive their parents on two dimensions – overprotection and care – that represent negative and positive aspects of parenting, respectively. If students receiving more helicopter parenting report higher overprotection scores it would support the generally held belief that helicopter parenting is indicative of a less than ideal parent-child relationship. If students receiving more helicopter
parenting behaviors report higher scores on the care dimension, it would be suggestive of a favorable parent-child relationship.

**Self-efficacy**

Self-efficacy is a powerful cognitive mechanism. Bandura (1977) defined self-efficacy as “the conviction that one can successfully execute the behavior required to produce the outcome”. Self-efficacy beliefs are competency specific and determine how people approach various tasks and situations in their life. People with a strong sense of self-efficacy for a particular task tend to persist at that task even in the face of difficulties. They view difficult tasks or situations as challenges to be mastered. A strong sense of self-efficacy helps the person recover quickly from setbacks and failures. A weak sense of self-efficacy, on the other hand, makes the person avoid difficult tasks and see them as a threat. People with low self-efficacy for a task tend to give up easily and attribute their failures to personal deficiencies rather than to a lack of effort. Individuals with low self-efficacy tend to feel that they have no control over difficult situations.

Self-efficacy beliefs of college students have serious implications for their overall college success. Self-efficacy about various competencies has been shown to have a very strong relationship with college persistence (Zajacova, Lynch, & Espenshade, 2005; Lent, Brown, & Larkin, 1984), academic performance (DeWitz, Woolsey, & Walsh 2009; Mattern & Shaw, 2010; Turner, Chandler, & Heffer, 2009; Wright, Jenkins-Guarnieri, & Murdock, 2012; Vuong, Brown-Welty, & Tracz 2010), stress (Zajacova, Lynch, & Espenshade, 2005), and adjustment to college (Smith, 2007).

**Research on Parenting Styles and Self-efficacy**
Research has generally shown parenting styles to be related to various child outcomes such as academic performance (Grolnick, Ryan, & Deci, 1991; Hickman, Bartholomae, & McKenry, 2000; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Elmen, & Mounts, 1989; Silva, Dorso, Azhar, & Renk, 2007), psychosocial development and risky behavior (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn et al., 1991; Steinberg, Mounts, Lamborn, & Dornbusch, 1991), providing strong evidence that an authoritative parenting style generally predicts the most beneficial outcomes for children and adolescents (Steinberg, 2001), at least in Western societies. There is also evidence that self-efficacy beliefs play a mediating role between parenting styles and children’s development (Aldhafri, 2011; Niditch & Varela, 2011). Yet, very few studies have explicitly addressed the relationship between parenting styles and children’s self-efficacy beliefs (Juang & Silbereisen, 1999; Whitbeck et al., 1997).

Helicopter parenting, which is characterized mainly by both overprotective/controlling as well as caring behaviors, tends to curtail young adults’ autonomy and helps maintain dependence on parents. It is therefore likely that these students may have a weak sense of self-efficacy as they might have very limited experience dealing with challenges or new situations on their own.

Statement of the Problem

As indicated earlier, parenting is related to children’s and adolescents’ self-efficacy beliefs. But, a better understanding is needed regarding parenting in relation to college students’ self-efficacy, especially in the context of helicopter parenting. While some aspects of helicopter parenting may be positive (support, involvement, affection), the controlling nature of helicopter parenting still has the potential to limit children’s autonomy and overall sense of self as distinct from their parents (Padilla-Walker & Nelson, 2012). According to Padilla-Walker and Nelson,
overprotective parents shield their adult children from problems before they arise and prevent them from dealing with any experiences on their own, it is reasonable to expect that children may not develop the skills needed to function independently as adults. This is especially important for self-efficacy as mastery experiences are one of the most important ways through which people develop self-efficacy (Bandura, 1977). Also, since children’s perceptions of parenting play a major role in their overall functioning and development (Grolnick, Ryan, & Deci, 1991; Li, Costanzo, & Putallaz, 2010), there is a need for further investigation of this aspect of helicopter parenting.

It is important to remember that research on parenting has been correlational in nature and therefore no causality can be established. As mentioned earlier, parenting may not always be the antecedent because of the likely reciprocal nature of the relationship. The current study, too, is correlational in nature and no causal interpretations can be made. This study is designed to understand the parent-child dynamic in the context of helicopter parenting and contribute towards a better understanding of parental involvement for people who work with college students.

The term “Helicopter Parenting” is a popular term and has not yet been adequately defined in the empirical literature (Padilla-Walker & Nelson, 2012). Some of the terms in the scientific literature that come closest to this type of parenting are oversolicitous parenting, overinvolved parenting (Padilla-Walker & Nelson, 2012), and overparenting (Segrin et al., 2012). Also, the term - helicopter parenting - as it is used in the media, tends to carry a negative connotation, implying that it is parenting that is harmful for adult children’s development. The term “parental involvement”, on the other hand, is a more neutral term which includes both helpful (e.g. emotional support) as well as potentially harmful (e.g. attending college classes with
the child) parenting behaviors. For these reasons, the term “parental involvement” will be used in this study.

**Research Questions**

1) How can the parental involvement reported by the undergraduates be described? What is the frequency of the various parenting behaviors?

2) Are there differences in the levels of parental involvement based on different characteristics of students (categorized by students’ gender, class standing, birth order, ethnicity, parents’ educational level, and GPA)?

3) What is the relationship between parental involvement and students' perceptions of parenting? For example, do students who experience more involved parents tend to perceive their parents as more caring compared to other students? Do students who experience more parental involvement tend to perceive their parents as more controlling compared to other students?

4) What is the relationship between parental involvement and students’ college self-efficacy beliefs? Based on available evidence, it is hypothesized that students who experience higher levels of parental involvement will demonstrate a weaker sense of college self-efficacy.
Chapter 2: Literature review

Emerging adulthood

Before the advent of sophisticated technology like the internet and various electronic devices, going away to college automatically resulted in a sharp decline in parent-child contact. The rather infrequent communication occurred mostly in the form of a weekly telephone call (Hofer, 2008). Leaving home for college was synonymous with becoming an adult and assuming full responsibility for oneself (Chickering, & Reisser, 1993). But for many college students today, this is no longer the case. This period between 18 and 25 years of age, at least for those in industrialized societies, has been newly defined as emerging adulthood (Arnett, 2000). It can be understood as a more winding path to adulthood, where college students can afford to explore their career options, identity, and romantic preferences, without significant pressures to assume adult responsibilities. Also, many undergraduates are at least partly dependent on their parents for college expenses (Lowe, Dotterer, & Francisco, 2015).

Research indicates that many young people in this age group do not think of themselves as “adults”. Nelson, Padilla-Walker, Carroll, Madsen, Barry, and Badger (2007) conducted online surveys of 392 college students and at least one of their parents. The researchers explored the specific criteria deemed to be markers of adulthood, by both emerging adults and their parents. Results indicate that most parents, like their children, did not consider these 18-25 year olds to be adults. This seems to suggest that the developmental journey from adolescence to adulthood has extended past the legal age for adulthood. Additionally, among the top four criteria necessary for adulthood, the children and parents agreed on only one – ‘Accept
responsibility for the consequences of your actions’. The remaining three criteria according to
the children’s reports were related to gaining independence from parents.

Advances in technology have made computers and other related products extremely
inexpensive, portable, and very user-friendly. In addition, fast internet speeds have facilitated
instant communication between people, regardless of physical distance. It is a common sight on
college campuses to see students texting, chatting, or otherwise engaged with their electronic
devices, between and during classes (Chen, & Katz, 2009). Availability of technology has also
made it easier for parents and children to stay in touch if and when they wish. Many college
students have reported communicating with their parents as frequently as 4-5 times per day
(Chen, & Katz, 2009). While some of these parents were concerned about their child’s safety,
others simply wanted to chat. This trend of frequent parental contact and involvement during the
college years is often referred to as “helicopter” parenting, and the parents have earned various
labels such as “snowplow parents” (English, 2009), and “black hawk parents” (Somers, & Settle,
2010), in popular media.

So how can one characterize this parent-child relationship during the college years? Is it a
new parenting style that has emerged? Padilla-Walker, and Nelson (2012) have offered a good
answer, by demonstrating a connection with Baumrind’s (1968) parenting styles.

Three parenting styles were first proposed by Baumrind (1968). She based her
descriptions of parenting styles on a combination of naturalistic observation and parent
questionnaires in a sample of 140 families of preschoolers in Berkeley. The three parenting
styles are essentially comprised of varying proportions of parental control and warmth.
Typically, authoritative parents provide support, nurturance, and appropriate levels of freedom
while setting firm but reasonable limits on their children’s behavior. The type of control they
exert over their children is not harsh or excessive and they acknowledge the needs, desires and feelings of the child. Authoritarian parenting consists of harsh discipline, extreme control and a disregard for the child as an individual. Such parenting provides very little warmth, nurturance, and support. Permissive parenting attempts to cater to every wish and need of the child, thereby providing excessive nurturance and responsiveness. Such parents usually place very few limits on their children’s behavior, thus allowing far greater autonomy to the children.

Padilla-Walker and Nelson (2012) have argued that helicopter parenting of adult children is a different construct which includes behaviors from all parenting styles, namely authoritative, authoritarian and permissive. They surveyed 438 undergraduates and at least one parent (for each child), and found that many students reported highly intrusive and micromanaging parental behavior, as well as high levels of warmth, support and guidance from parents. Parents’ responses indicated that they were deeply concerned about the well-being and success of their children. The authors concluded that helicopter parenting is a construct that is distinct from the three parenting styles (mentioned above), while showing a considerable overlap with some of the components of those styles. This type of parental behavior denies the adult children autonomy and independence (authoritarian), provides nurturance (authoritative) and aims at keeping the children safe, happy and free from difficulties (permissive).

Current research findings on parenting of college students

The extant body of literature on parenting of adult children defines the construct in different ways. Depending on the approach of the study, the results and implications also differ. The most commonly used term is helicopter parenting (LeMoyne & Buchanan, 2011; Schiffrin et al., 2013), but studies have also used terms such as overparenting (Segrin et. al, 2013), parental support (Fingerman et. al, 2012; LaBrie, & Cail, 2011), parental communication (Chen, & Katz,
Using semi-structured interviews to collect data from 18 juniors, Cullaty (2011) found that parental involvement in the form of support, adult-adult relationship, and responsibility-fostering behaviors helped students develop autonomy. Parental involvement that was excessively intervening, directive, and controlling led to poor autonomy development among college students. Hofer (2008) also reported similar results for excessive parental regulation and students’ autonomy development in a sample of 215 freshmen and 192 sophomores. Some studies have also found helicopter parenting to be related to much more serious psychosocial factors, including depression, the use of prescription medication and pain pills among college students. For example, LeMoyne and Buchanan (2011) surveyed 317 college students and found that students who experienced higher levels of helicopter parenting reported poorer outcomes on six factors of overall psychological well-being (including autonomy and environmental mastery). Higher levels of helicopter parenting were also related to greater chances of having a prescription for anxiety/depression, and greater use of pain medication among college students. A similar link between helicopter parenting and depression was demonstrated in a sample of 297 college students by Schiffrin et. al (2013). The authors concluded that this link was explained via a mechanism of lower perceived autonomy by the students. For some students, overparenting has been found to relate to anxiety indirectly through its contribution to their ineffective coping skills (Segrin et al., 2013).

A few studies, however, have suggested that parent-child communication, and parental support during college might be associated with constructive outcomes for the students. LaBrie and Cail (2011) studied the frequency of parent-child contact during college, and the students’
drinking behavior. The mere frequency of contact with mothers, regardless of the content of communication, was negatively related to female students’ drinking in college. Additionally, maternal contact was strong enough to moderate the influence of peers on female students’ drinking behavior. There is also some reason to believe that parental support is related to better psychological outcomes for grown children, despite the children’s less positive perceptions of such support. Fingerman et. al (2012) found that adult children who received intense parental support (emotional, financial, advice) reported better psychological adjustment and life satisfaction, even though they themselves perceived this support to be excessive.

Similarly, parental involvement has been shown to have implications for the overall experience of first-generation college students. Bryan and Simmons (2009) conducted a qualitative study among 10 first-generation Appalachian college students in Kentucky, to understand the familial and other factors in college success. The participants reported a lack of fit between their family environment and their college environment. Due to unfamiliarity with the college experience, the parents were unable to provide the emotional and practical support that the children wished to receive from them. Even though these parents understood the significance of a college education, they were simply unaware of the real expectations of a college culture. Therefore, a lack of parental involvement was one of the roadblocks in the success of these rural first-generation college students. Another larger, quantitative study also found parental involvement to be a strong predictor in the educational aspirations of first-generation college students (McCarron, & Inkelas, 2006). Longitudinal survey data was collected from 1,879 students beginning from the sophomore year in High school until eight years past High school. Parental Involvement comprised four items – parents helping with homework, discussing school courses with parents, discussing SAT/ACT preparation with parents, and discussing ‘going to
college’ with parents. It was found that first generation students had significantly lower educational aspirations than non first-generation students. Even those first-generation students who aimed to complete a higher degree in education during the High school years, actually fell short of attaining that goal in college.

As one can see from the above summary, parental involvement may have beneficial as well as harmful factors associated with it, in terms of the overall psychosocial needs of the adult children. This also seems to suggest that not all parental involvement is identical. Some parental behaviors might be perceived as emotional support, some as practical advice, and others as intrusive and micromanaging by the adult children. There is, however, very little literature available about how college students perceive the parenting that they receive.

**Perception of parenting**

Perception can be understood as the process by which human beings understand their environment. It involves the organization and the interpretation of available information. The perception of a given object, event, process, person, or any other stimulus may vary among different individuals based on their own characteristics, knowledge, experience, and other personal factors. Gaylord, Kitzmann, and Coleman (2003) surveyed 214 school-aged children and their parents for a study designed to measure the discrepancies in parent and child perceptions of parenting, and related child outcomes. The researchers found that parents’ perceptions of their own supportiveness were different from those of their children. Parents perceived themselves to be more supportive than did their children. These results provide evidence for the important concept that children’s perceptions of the parenting they receive are different from parental perceptions, as well as from the perceptions of other adults.
Research on the traditional parenting styles has demonstrated strong links between reported parenting and child outcomes. A perceived authoritative parenting style generally predicts the best outcomes for children, at least in the West, while perception of parents as authoritarian or negligent is frequently related to poor academic and psychosocial outcomes for children. Steinberg, Mounts, Lamborn, and Dornbusch (1991) studied a heterogeneous sample (with respect to SES, ethnicity, family structure, and type of community) of 8000 high school students from Wisconsin and California. The students completed questionnaires that measured adolescent adjustment and the students’ perceptions of authoritative parenting. Adolescent adjustment consisted of measures of school performance, psychosocial maturity, internalized distress, and behavioral problems. Results indicated that students who perceived their parents as authoritative had higher GPAs, were more self-reliant, had lower psychological distress, and fewer behavioral problems. A follow up study after one year showed that the results had been maintained (1994). A more recent study conducted by Wolfradt, Hempel, and Miles (2003) investigated the relationship between perceived parenting style and psychological outcomes, including depersonalization, anxiety, and coping behavior. The researchers collected data from 276 high school students. Results showed that students who perceived their parents as either authoritative or permissive scored higher on active coping behavior. Students in the authoritarian parenting group had higher scores on measures of depersonalization and anxiety. With respect to the individual components of each parenting style, the results indicated that higher perceived parental psychological pressure was associated with higher anxiety and depersonalization. Perceived parental warmth was positively correlated with active coping, and negatively related to anxiety and depersonalization.
Individual characteristics of the adult children that might influence the overall parent-child relationship also need to be taken into consideration. The parent-child relationship is bidirectional, and parents and children are unique individuals who bring their idiosyncrasies to the relationship. Researchers have studied how children themselves can be important determinants of the parenting that they receive. Rubin, Nelson, Hastings, and Asendorpf investigated this phenomenon in a sample of 60 two year olds and their parents (1999). Data were gathered longitudinally at two points in time. The parents completed surveys that measured their perception of their child’s shyness at age 2, and about their preferred parenting practices, especially with respect to encouragement of independence. The results revealed that the parents who perceived their children as shy at age 2 were less likely to adopt parenting practices that encouraged independence at age 2, and this parental behavior decreased further at age 4. The parental perceptions also remained stable from child age 2 to 4. This connection between child inhibition and parental intrusiveness was further supported by Kiel, and Buss (2013). The researchers observed the behavior of 92 two year olds and their mothers in a laboratory setting using the Risky Room paradigm. In addition, mothers rated their own levels of embarrassment based on hypothetical shyness vignettes about their own child. Maternal stress was measured by salivary cortisol samples provided by the mothers before and after the study. It was found that maternal stress levels and embarrassment moderated the relationship between child inhibition and maternal intrusiveness. The same might also be true for many college students. Many college students who tend to have anxious or depressive dispositions (in the studies reviewed above) could be indirectly soliciting a higher parental involvement in their lives. These adult children may perceive parental involvement in a different way than students who do not face the same problems.
Self-efficacy

The concept of self-efficacy proposed by Bandura (1977) has been researched widely in various fields, some of which are education (Mattern & Shaw, 2010; Vuong, Brown-Welty, & Tracz, 2010), addictions (Majer, Jason, & Olson, 2004), parenting (Dumka, Gonzales, Wheeler, & Millsap, 2010; Sanders, & Woolley, 2005), health (Strecher, DeVellis, Becker, & Rosenstock, 1986), and sports (Slanger, & Rudestam, 1997). Self-efficacy is believed to be a very powerful cognitive mechanism. The concept has its roots in the social-cognitive theory. Social-cognitive theory states that human functioning involves reciprocal interactions between 1) a person’s behaviors, 2) personal factors including cognition, emotion and physiology, and 3) environmental influences. In a parent-child relationship, this would include the reciprocal interactions between the parent, the child, and the perception of that relationship that could be explained as follows: Beginning at birth, the parents’ own personalities and beliefs will underlie their parenting practices. The child’s behavior will be shaped by this parenting to some extent, but the unique characteristics of the child will also determine the parents’ behavior. The inner mental and affective processes unique to each individual will play a role in the overall dynamic. The child’s self-efficacy, a personal factor, may similarly determine or get determined by parenting.

Self-efficacy beliefs, an important component of the social-cognitive theory, play a key role in motivation for and persistence at a task. Research has shown that the belief that people have about their capabilities is a stronger predictor of their behavior than their actual capabilities (Majer, Jason, & Olson, 2004; Zimmerman, 2000). People will often choose tasks for which they have high self-efficacy and avoid tasks for which they do not. Similarly, the efforts expended
toward a particular task also tend to be greater if the person has a high self-efficacy for that task (Bandura, 1977).

The study of self-efficacy in the context of college parenting is important for two reasons. Firstly, self-efficacy pertains to the subjective notion of “self” (Choi, 2005) that people have about themselves. Some examples of self-constructs include self-worth, self-esteem, self-concept, and self-efficacy. The main concern implied by the anecdotal and empirical data about college parenting is tied closely to its relationship with college students’ sense of “self”. It is believed that overbearing parental behaviors could potentially hinder the development of college students becoming self-sufficient and responsible adults. Self-efficacy is an important construct in this context as mastery experiences are one of the four instrumental factors in developing self-efficacy for various tasks (Bandura, 1977). In order to gain mastery experiences in any task, it is necessary to have sufficient exposure to that task, even if it involves some initial failures and mistakes. If parents of college students try to either make sure that their children face no problems, or if they rush to help them resolve their issues (such as issues with course grades, roommates, etc.), it can potentially limit the children from learning to navigate their own way through common problems. This, in turn, might leave very few opportunities for college students to gain mastery experiences, thereby affecting their self-efficacy beliefs.

Secondly, research has shown that self-efficacy beliefs play a crucial role in the overall success of college students, including factors such as college student performance and persistence, emotional well-being, overall adjustment, and academic success. For example, in a survey of 105 undergraduates (freshmen and sophomores), Lent, Brown, and Larkin (1986) observed that self-efficacy beliefs were significant predictors of academic grades and persistence, after controlling for variables such as prior grades, ability, PSAT scores and declared
Similar to the major. Similarly, self-efficacy beliefs also made a significant contribution to the range of career options that the students considered. A significant relationship was found between academic self-efficacy beliefs and academic outcomes in a study of 107,453 undergraduates from across the U.S. (Mattern & Shaw, 2010). The researchers measured academic self-efficacy for math and writing abilities. Academic outcomes of interest were high school GPA, second year retention rates, SAT scores, and freshman year GPA. Both, math and writing self-efficacy beliefs were positively related to all the academic outcomes.

Studies have also shown that self-efficacy is related to important psychological factors for college students. In a longitudinal study of university freshmen, Chemers, Hu, and Garcia (2001) found that academic self-efficacy and optimism were strongly related to students’ academic performance, stress, health, and to their commitment to remain in school. Data were collected from participants at two different points in one academic year. The first survey received 373 responses while the second survey received 256. Academic self-efficacy was positively related to challenge-threat evaluations, meaning that those with a higher academic self-efficacy perceived difficult academic tasks as challenges rather than as threats. These students also reported lower levels of stress than those with a weak sense of self-efficacy. Overall, academic self-efficacy was strongly and directly related to academic performance, and indirectly to stress, health, and commitment to remain in school.

In another study, Brady-Amoon and Fuertes (2010) investigated self-efficacy, self-rated abilities, adjustment, and academic performance among 271 undergraduates. The CSEI was used as a measure of self-efficacy. Self-efficacy was found to be a significant predictor of adjustment. Self-efficacy, self-rated abilities and adjustment together made a significant contribution to students’ academic performance after controlling for prior performance.
A survey was designed to explore the relationship between self-efficacy beliefs and purpose in life, as possible contributors to college retention (DeWitz, Woolsey, and Walsh, 2009). The sample comprised 344 undergraduates. According to the authors, previous research has shown that purpose in life is an important construct associated with factors in academic success. This study found that students’ scores on all self-efficacy instruments were positively related to scores on purpose in life.

**Studies on college self-efficacy**

The construct of College Self-efficacy includes academic, social and roommate self-efficacy of college students. Going away to college can be a challenging transition for many students, not only academically, but also with respect to social relationships and adult responsibilities (Chickering & Reisser, 1993). The expectations of college life can seem very different to those adolescents are used to in their homes. A greater sense of college self-efficacy could help the students to adjust to college, as well as enhance the overall college experience.

College self-efficacy was found to be related to academic success (GPA) and persistence rates of first-generation college sophomores (Vuong, Brown-Welty, & Tracz, 2010). Using the College Self-Efficacy Inventory, the authors gathered data from 1291 college sophomores at five of the twenty three campuses of California State University. In another study, Wright, Jenkins-Guarnieri, and Murdock (2013) reported that the Course subscale of the CSEI was positively related to college persistence in a sample of 401 college freshmen, 41% of whom were first-generation.

Gore, Leuwerke, and Turley (2006) investigated the CSEI using a sample of 257 freshmen, and found that the total CSEI scores were significantly related to college retention.
Additionally, scores on the Course and Social self-efficacy subscale were significant predictors of expected GPA at the end of the first semester.

An authoritative parenting style has been shown to be positively related to children’s sense of self-efficacy. Research has also focused on the individual components of authoritative parenting (support, warmth, and nurturance) to explain children’s self-efficacy beliefs.

In a study of 112 adolescents (ages 12-16), researchers found that parental nurturance was the strongest predictor of perceived self-efficacy (Hoeltje et al., 1996). The Perceived Self Efficacy (PSE) is a scale that measures children’s confidence in handling various everyday life issues. Similar results were obtained in a 3-year longitudinal study that examined consistently supportive versus inconsistently supportive parenting among 283 adolescents in Germany (Juang & Silbereisen, 1999). Consistently supportive parenting was strongly related to higher self-efficacy, better school performance and fewer psychosocial problems. Strage and Brandt (1999) reported findings that are consistent with the research evidence on links between authoritative parenting and beneficial child outcomes. The participants in the study were 236 college students. Students who reported having experienced an authoritative parenting style scored higher on mastery orientation during college. The results also showed that the parenting experienced during childhood and adolescence continued to play a role during college.
Chapter 3: Methodology

Research Design

This study employed a cross-sectional survey research design. A combination of descriptive analyses and multiple regression was utilized to investigate the relationships between parental involvement, perceptions of parenting, and student self-efficacy for college related tasks.

Participants. Participants were traditional age undergraduates at the University at Albany across all majors and years. They ranged in age from 18 to 24 years with a mean of 20.03 years ($SD = 1.321$). The sample comprised 108 females and 45 males, including one participant who did not indicate any gender. The percentages of juniors and seniors were almost identical; 29.2 and 29.9 respectively, followed by sophomores (22.7) and freshmen (18.2). With respect to ethnicity, 55.8% of respondents identified as White/Caucasian, 14.3% as African-American, 7.1% as Other Latino, 5.8% as Asian-American, 5.2% as Puerto Rican, and 1.3% as Native Hawaiian/Pacific Islander. 9.7% of the respondents belonged to an ethnicity other than those mentioned and included students with mixed ethnicities. A majority of the participants had at least one sibling as indicated by their birth order; youngest child (35.1%), oldest child (33.8%), and middle child (22.1%). The remaining 9.1% of the students reported being an only child.

Analyses were only performed for students who live away from their parents and were born in the United States. International students were excluded as no research evidence was found for helicopter/overinvolved parenting outside of the Euro-American culture. Search terms like “helicopter parenting” and “Hispanic”/“Asia/China/India”/“Africa”/“cultural differences” returned no results in PsycInfo. Also, even if such parenting occurs among international students,
its cultural context will likely be different from that in the United States (Nesteruk, & Marks, 2012; Li, Costanzo, & Putallaz, 2010), making it difficult to generalize the results.

No identifying information about the students was collected.

**Sampling.** As participation in the study was voluntary, participants could choose whether to take the surveys or not. This resulted in a self-selected sample. It was not a random sample. Required sample size for multiple regression was determined by a power analysis. With power set to 0.80 (Cohen, Cohen, West, & Aiken, 2003), an alpha of 0.05, a medium effect size (r) of 0.15 for correlational studies (Cohen, 1992), and 9 predictors (6 student characteristics and 3 scale scores), the required sample size was approximately 114. Taking into consideration missing or otherwise unusable data, I had a target sample of at least 250-300 undergraduates. At the end of data collection over 3 semesters, there were 231 surveys including 17 online surveys. Before entering the data into SPSS, 14 blank paper and pencil surveys were dropped. Seven of the online surveys were also discarded because of incompleteness. Surveys where the participants were born outside of the United States (29), or who lived at home (22) were excluded as well. This resulted in a usable sample of 159 cases. After entering data for 159 cases, 5 more had to be removed because they had non-responses on more than one instrument. The final dataset consisted of 154 participants with less than 3% missing data.

**Recruitment.** Participants were recruited from undergraduate classes with permission from the instructors. In order to ensure that the sample was representative of undergraduate students, participants were recruited from randomly selected classes from the undergraduate class schedule for each semester.
In addition to paper and pencil surveys, the researcher also obtained permission from IRB for online data collection. The same survey was made available in an online format on Qualtrics, and an anonymous link to the survey was forwarded to students via their instructor’s email.

The paper and pencil surveys were administered by a colleague of the researcher with appropriate IRB approval. In order to ensure that students did not take the same survey during different classes and during different semesters, they were explicitly told not to do so. For both formats of data collection permission from the instructors was obtained by the researcher via email.

Measures.

Parental involvement measured by the Parental Involvement Scale.

As helicopter parenting during college is a relatively recent field of research and because the construct is not well defined, there is no single, agreed upon instrument that researchers use to measure these behaviors. Published and unpublished literature (such as recent dissertations) contains questionnaires that have been created for each specific study. For the present study, this author created a questionnaire by combining and modifying parental behavior items from two of the available studies. The author also added some items of her own to capture parenting behaviors not included in the two studies (e.g., “Parents expressed concern if they did not hear from you”). This new scale is the focus of this study in order to understand the construct better, and also to explore its relationship with the other variables.

One of the two relevant studies was a doctoral dissertation by Golonka (2013) which contained detailed questions about parental contact during the college years. A subsection of Golonka’s questionnaire, containing 10 items, was used (with the author’s permission) in the
current study. These items measure the frequency with which college students experience characteristic helicopter parenting behaviors (e.g. “How often has your parent contacted your roommate’s parent about a problem?”). The responses are scored on a 5-point Likert-scale with options ranging from 1 (Never) to 5 (Very often). Total scores on this scale range from 10 (low) to 50 (high). Reliability for this scale has not been reported. According to this author’s judgment, the items in this instrument appear to demonstrate good face validity. Items like “Called you with a wake-up call”, “Contacted your roommate’s parents” measure the micromanaging and developmentally inappropriate parenting of college students.

The second study from which questions were selected was a study that investigated overparenting experienced by young adults (Segrin et al., 2012). An overparenting scale containing 39 items was created for parents of adults in the original study (e.g. I do anything that I can to keep my child out of harm’s way; I am happy to do day-to-day chores for my child such as cooking, cleaning, and laundry when possible). Parents were asked to rate their agreement for each item on a 5-point Likert scale (1 = Strongly disagree, to 5 = Strongly agree). Exploratory factor analysis revealed a four factor model consisting of Anticipatory Problem Solving, Advice/Affect Management, Child Self-direction, and Tangible Assistance. Reliability and validity have not been reported for this scale.

Selected questions from this scale were modified for use in the current study (with the original author’s permission). As the original scale was designed for parents, the questions were rephrased to reflect the adult children’s experiences of those behaviors (e.g. “I am happy to do day-to-day chores for my child such as cooking, cleaning, and laundry when possible” was changed to “My parents help me with day-to-day chores such as cooking, cleaning, and laundry
when possible”). The responses were scored on a 5-point Likert scale with scores ranging from 1 (Never) to 5 (Very often).

The new scale, called the Parental Involvement Scale, has 32 items with total scores ranging from 32 to 160. This scale showed high reliability as determined by a Cronbach’s alpha of 0.916 in the current study. The Cronbach’s alpha measures the consistency of scores across all items in the instrument by calculating the average of all possible inter-item correlations. A Cronbach’s alpha of 0.7 or greater is considered acceptable in most social science research.

**Perceptions of parenting measured by the PBI.**

The Parental Bonding Instrument (PBI) devised by Parker, Tupling, and Brown (1979) was used to assess college students’ perceptions of parenting. The PBI measures retrospective perceptions of parenting by asking adults to recall parenting behaviors that they experienced during the first sixteen years of their life. It has 25 identical items for each parent and has a two-factor model consisting of “care”, and “overprotection/control”. An example of a Care item would be, “Appeared to understand my problems and worries”, while an example of an Overprotection item would be, “Tended to baby me”. The PBI is completed separately concerning mothers and fathers. It specifies and quantifies adult perceptions of certain parenting behaviors. The care scores range from 0 (minimum) to 36 (maximum), and the overprotection scores range from 0 to 39. The PBI has been used widely with adults over the age of sixteen, among clinical and non-clinical samples, and has been shown to have excellent psychometric properties (Klein & Pierce, 2010; Parker, Tupling, & Brown, 1979; Parker, 1983; Villalta, Arévalo, Valdepérez, Pascual, & de losCobos, 2014). Test-retest reliability has been shown to range from 0.63 - 0.88 (Locke & Prinz, 2002) and the instrument has good construct validity (Garbarino, 1996). The PBI is not held under copyright and can be used freely for research.
purposes. In the current study, the Cronbach’s alpha for the Care subscale of the PBI was 0.887, while the Overprotection subscale demonstrated an alpha of 0.856.

For both scales mentioned above [the Parental Involvement scale, and the PBI (Parker, Tupling, & Brown, 1979)], a single parenting score was reported by asking students about the overall parenting that they receive. Even though the original scales yield separate scores for mothers and fathers, maternal and paternal parenting behaviors are more similar than different (Fagan, Day, Lamb, & Cabrera, 2014). Especially in recent generations, maternal and paternal parenting is converging and child outcomes for both parents are likely to be similar. According to Fagan et al., there is insufficient evidence to assume that maternal and paternal parenting constructs are qualitatively different. Also, using ‘parents’ helps avoid the problem of students having different numbers of parents, and some lacking either a mother or father figure who actively parented them. These parenting scenarios are more common now than they were earlier as family structure is changing rapidly, with an increase in single-parent households (Livingston, & Parker, 2011).

**College self-efficacy measured by the CSEI.**

The College Self-Efficacy Inventory (CSEI) devised by Solberg, O’Brien, Villareal, Kennel, and Davis (1993) was used (with permission) to measure students’ self-efficacy for various college related tasks. Self-efficacy is best measured as a specific task-oriented construct (Bandura, 1997). The present study, however, needed a sufficiently broad measure of self-efficacy to capture the overall college experience. More universal measures of self-efficacy (for example, the Generalized Self-Efficacy Scale devised by Schwarzer and Jerusalem in 1995), would be too general to apply specifically to college situations. The CSEI, therefore, was a good choice for the current study as it is neither too broad nor too narrow in its scope.
The CSEI consists of 20 items that measure students’ confidence in completing a variety of college specific tasks (e.g. “Talk to university staff”, “Make new friends at college”). The responses are scored on a 10-point Likert-scale ranging from 1 (Not at all confident) to 10 (Extremely confident). Possible scores for this scale range from 20 (low) to 200 (high). Studies have demonstrated a very good internal consistency for this scale with alpha coefficients ranging from .88 in the original study to .95 in subsequent studies (Gore, Leuwerke, & Turley, 2006; Vuong, Brown-Welty, & Tracz, 2010). The Cronbach’s alpha for the CSEI was 0.896 in the present study.

**Qualitative data collection**

The following open-ended questions were asked in order to better understand students’ attitudes towards, and experience with, continued parental involvement. Qualitative data is useful as it can provide insight into feelings, attitudes, beliefs and opinions of people that are not easily discernible through quantitative measures. Open-ended questions can help people describe what they want to, without being constrained by any specific response choices.

1) In your opinion, what, if any, are the advantages of having frequent communication with parents?

2) What type of parenting behaviors (not mentioned in the survey) have you experienced since you started college?

3) Can you give an example of an occasion you were pleased to have communication from your parent(s)? Explain why it was helpful.

4) Can you give an example of an occasion you were NOT pleased to have communication from your parent(s)? Explain why it was NOT helpful.
Demographic data

Demographic data were collected about students’ age, gender, birth order, birth country, family size, parents’ education, ethnicity, class standing, resident status, most recent GPA, and their anticipated GPA at the end of the ongoing semester. (This is to account for the fact the incoming freshmen will not yet have a prior college GPA). A correlation was calculated between the anticipated and earned self-reported GPA for all students. A significant moderate positive relationship was found between the anticipated GPA and the most recent GPA, $r(151) = .507, p < .001$. Therefore, the anticipated GPA was used for all students.

Procedures

Data were collected via paper and pencil surveys distributed in classrooms, as well as via an online link, after obtaining approval from the IRB of the University at Albany. Along with demographic questions, students were asked to fill out three questionnaires that measure parental involvement, perceptions of parenting, and college self-efficacy. The questionnaires were: Parental Involvement Scale, measuring parental involvement; PBI (Parental Bonding Instrument), measuring perceptions of parenting; and CSEI (College Self-Efficacy Inventory), measuring self-efficacy for college related tasks. The order of these three questionnaires was rotated across students in order to control for priming effects (Visser, Krosnick, & Lavrakas, 2000). Priming effects are said to occur when initial questions on surveys set up the respondents’ thoughts or feelings toward a particular issue or concept. This can affect how respondents answer subsequent questions.

Students’ perspectives and experiences about helicopter parenting were explored for qualitative purposes via open ended questions placed at the end of the quantitative survey.
Data Analysis

**Missing data.** Handling of missing data depends on several factors including sample size, nature and the amount of missing data (Cohen, Cohen, West, & Aiken, 2003). The final dataset of 154 participants had less than 3% of data missing. These data were missing completely at random (MCAR) as evidenced by a non-significant value of the Little’s MCAR test in SPSS (p > 0.05) (Little, 1988). Non-response on variables was the only reason for missingness, as opposed to ambiguous responses (e.g., multiple responses for a single item). Missing data were replaced using the expectation maximization (Dempster et al., 1977) algorithm (EM) in SPSS. If less than 3% data is missing, the methods used to eliminate or replace them do not make a big difference (Cohen, Cohen, West, & Aiken, 2003). Given the amount and nature of missing data in this study makes EM a good choice. Expectation maximization involves estimating a value for the missing data point based on the probability distribution of those variables in the observed data, and then re-estimating regression models based on these guessed data points. This process is iterative, meaning that the sequence is repeated until the estimated value gives the best fitting model. SPSS computes 25 iterations by default.

*Analysis for Research Question 1.* How can parental involvement reported by the undergraduates be described? What is the frequency of the various parenting behaviors?

Descriptive analyses were used to answer the above questions. Specifically, means and standard deviations for each behavior were reported.

*Analysis for Research Question 2.* Are levels of parental involvement associated with different student characteristics?
A multiple regression analysis was used to investigate the relationships between the amount of parental involvement and the following student characteristics - students’ gender, class standing, birth order, ethnicity, mother’s educational level, father’s educational level, and GPA. A multiple regression was chosen, as a variable may sometimes be non-significantly related to the outcome variable in a single test but become significant in combination of other variables. Multiple regression can be used with continuous and categorical variables. Dummy coding was performed for the categorical variable of birth order.

*Analysis for Research Question 3.* What is the relationship between levels of Parental Involvement and students’ Perceptions of Parenting?

Multiple regression was utilized to answer this question. Covariates for the model were chosen both theoretically and empirically.

Research has shown that gender and birth order can play a role in perceptions of parenting at least up until adolescence (Someya, Uehara, Kadowaki, Tang, & Takahashi, 2000). Therefore gender of participants and birth order were included as covariates for this analysis. Additionally, students’ GPA was also included in the model as a covariate along with care and overprotection scores.

Available literature on parenting during college offers very little insight into students’ perceptions of parenting, therefore no specific prediction could be made about the direction or magnitude of this relationship.

In order to reduce the chance of Type I error, the Holm-Bonferroni correction was used. For this specific analysis, a Type I error will occur if any of the covariates shows a false significant relationship with the criterion variable. The Holm-Bonferroni adjustment will control
the Type I error rate for all coefficients examined so that the overall $\alpha$ is less than or equal to 0.05 (Holm, 1979).

**Analysis for Research Question 4.** What is the relationship between levels of Parental Involvement and Students' College Self-efficacy beliefs?

The relationship between parental involvement and college self-efficacy was investigated using a regression analysis. Level of parental involvement, as measured by the total score on the Parental Involvement questionnaire was the predictor variable and college self-efficacy was the criterion variable. A regression analysis is useful when one wants to know how much of the variation in the criterion variable is associated with variation in the predictor variable(s).

Given that self-efficacy for a task is greatly influenced by experience with that task (Bandura, 1977), it is reasonable to think that the more experience students have in a college setting, the higher their college self-efficacy will be. Therefore students’ class standing is an important variable which was included as a covariate for this research question. Gender differences have also been reported for the Total score and two of the three subscales of the CSEI (Gore, Leuwerke, & Turley, 2006) where female college students scored higher than males. Therefore, gender was also included as a covariate for this analysis. Other variables that were included in this model were anticipated GPA, perception of care, and perception of overprotection. It was predicted that higher levels of parental involvement would be related to lower levels of perceived college self-efficacy.

The regression analysis for this question aimed at explaining the variation in college self-efficacy scores in terms of the variation in levels of parental involvement scores, when gender, class standing, and other demographic variables are held constant. All variables were entered
simultaneously in the model. Any covariates that showed a non-significant relationship with college self-efficacy were removed from the model. The Holm-Bonferroni correction was used to control Type I error rate. Such post-hoc adjustments are useful in regression analyses where the unique contribution of each predictor variable is of interest (Mundfrom, Perrett, Schaffer, Piccone, & Roozeboom, 2006).

**Chapter 4: Results**

The purpose of the current study was to examine the construct of parental involvement during college, as measured by the Parental Involvement scale, and to assess its association with student perceptions of parenting and college self-efficacy, while controlling for demographic variables. The Parental Involvement scale was the outcome variable for research questions 2, and 3, and the predictor variable for research question 4.

Scatterplots of the data were inspected to rule out any non-linear patterns among variables. The scatterplots showed clustered data points without any curvilinear pattern. The data were found to be suitable for carrying out regression analyses (see Appendix A).

**Research question 1**

Research question 1 concerns the frequency of various parenting behaviors reported by college students. The mean and standard deviation for each behavior on the Parental Involvement Scale is shown in Table 1. The three parenting behaviors reported most frequently were “Told you they love you”, “Made sure you had everything you needed”, and “Called to see how you were doing” with means of 4.53, 4.39, and 4.16 respectively. Three out of the twelve least-reported behaviors were “Contacted your roommate’s parents about an issue you had”,

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“Contacted your roommate about an issue you had”, and “Attended classes with you” with means of 1.07, 1.06, and 1.04 respectively.

In summary, the nature of parental involvement in the lives of college students is more appropriately considered supportive, loving, and caring, whereas micromanaging parental behaviors are almost nonexistent in these students’ reports.

Table 1

Means and Standard Deviations of Items on Parental Involvement Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Told you they loved you</td>
<td>4.53</td>
<td>0.75</td>
</tr>
<tr>
<td>Made sure you had everything you needed</td>
<td>4.39</td>
<td>0.89</td>
</tr>
<tr>
<td>Called to see how you were doing</td>
<td>4.16</td>
<td>0.96</td>
</tr>
<tr>
<td>Provided encouragement in difficult situations</td>
<td>3.77</td>
<td>1.15</td>
</tr>
<tr>
<td>Cheered you up</td>
<td>3.77</td>
<td>1.07</td>
</tr>
<tr>
<td>Talked to you about college life</td>
<td>3.73</td>
<td>1.11</td>
</tr>
<tr>
<td>Expressed concern if they didn’t hear from you</td>
<td>3.62</td>
<td>1.28</td>
</tr>
<tr>
<td>Pressured you to perform well academically</td>
<td>3.21</td>
<td>1.33</td>
</tr>
<tr>
<td>Talked to you about your boyfriend/girlfriend/date</td>
<td>3.16</td>
<td>1.40</td>
</tr>
<tr>
<td>Gave you ideas about solving an issue</td>
<td>3.12</td>
<td>1.22</td>
</tr>
<tr>
<td>Sent you a gift</td>
<td>2.95</td>
<td>1.28</td>
</tr>
<tr>
<td>Sent you food/care package</td>
<td>2.62</td>
<td>1.32</td>
</tr>
<tr>
<td>Tried solving a problem for you as soon as they heard about it</td>
<td>2.58</td>
<td>1.32</td>
</tr>
<tr>
<td>Helped you with transportation</td>
<td>2.56</td>
<td>1.29</td>
</tr>
<tr>
<td>Asked about your alcohol use</td>
<td>2.46</td>
<td>1.18</td>
</tr>
<tr>
<td>Sent you new clothes</td>
<td>2.33</td>
<td>1.35</td>
</tr>
<tr>
<td>Played an active role in the selection of your career/major</td>
<td>2.29</td>
<td>1.28</td>
</tr>
<tr>
<td>Offered suggestions on how to make friends/form new relationships</td>
<td>2.17</td>
<td>1.25</td>
</tr>
<tr>
<td>Took care of a problem for you before it arose</td>
<td>2.14</td>
<td>1.24</td>
</tr>
<tr>
<td>Planned certain activities for you</td>
<td>2.04</td>
<td>1.25</td>
</tr>
<tr>
<td>Helped you with day-to-day chores such as laundry</td>
<td>1.80</td>
<td>1.16</td>
</tr>
<tr>
<td>Used your login ID or email to conduct college business for you</td>
<td>1.75</td>
<td>1.11</td>
</tr>
<tr>
<td>Called you with a wake-up call</td>
<td>1.62</td>
<td>0.97</td>
</tr>
<tr>
<td>Helped with course assignments/projects</td>
<td>1.50</td>
<td>0.87</td>
</tr>
<tr>
<td>Edited a course paper for you</td>
<td>1.38</td>
<td>0.80</td>
</tr>
</tbody>
</table>
Research question 2

In order to answer the second research question pertaining to differences in levels of parental involvement across student characteristics, a multiple regression analysis was used (Table 2). The overall regression model with students’ gender, class standing, birth order, ethnicity, mother’s educational level, father’s educational level, and GPA as predictor variables and parental involvement score as the outcome variable was significant, $F(9,134) = 2.071, p=0.036$. The adjusted $R^2$ for the model was 12.2%, which is a small effect size, meaning that the variables in the regression model only explain 12% of the variability in parental involvement. After using the Holm-Bonferroni correction, none of the predictor variables were found to be significant.

To conclude, differences in the levels of parental involvement in this model cannot be sufficiently explained by students’ characteristics.

Table 2

*Summary of multiple regression analysis between parental involvement and student characteristics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reminded you of an upcoming test/paper</td>
<td>1.38</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asked for a copy of your course syllabus</td>
<td>1.21</td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacted your resident advisor on your behalf</td>
<td>1.16</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacted a professor regarding your work or grades</td>
<td>1.08</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacted your roommate’s parents about an issue you had</td>
<td>1.07</td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacted your roommate about an issue you had</td>
<td>1.06</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended classes with you</td>
<td>1.04</td>
<td>0.25</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* 1=Never, 5=Very often.
Research question 3

The focus of the third research question was to assess the relationship between the care and overprotection scores of the Parental Bonding Instrument with the parental involvement score. Therefore, the care and overprotection scores were included in the regression model along with the most promising and theoretically significant predictors from the previous model: anticipated GPA, gender and whether the student was the oldest child. The rationale was the same as before – to check the significance of each predictor in combination with other predictors on the dependent variable parental involvement. The overall regression model was significant, $F(5,145) = 16.953, p < 0.001$. The adjusted $R^2$ was 36.9%, which is a moderate effect size, meaning that the variables in the model explained 36.9% of the variability in parental involvement scores. After using the Holm-Bonferroni correction, the care score and the overprotection score were found to be significant along with anticipated GPA. Gender and birth order were not significantly related to parental involvement.
To summarize, parental involvement correlated positively with perception of care, as well as with perception of overprotection. On average, for each additional point on the care scale, respondents had about a 1.8 point higher score on parental involvement. Similarly, for each additional point on the overprotection scale, participants scored about 0.6 point higher on parental involvement. Anticipated GPA demonstrated a weak, negative relationship with parental involvement. For example, people with 1 point higher on anticipated GPA (out of 4 points) would be predicted to have about 7 points lower on the parental involvement score. Perception of care had a stronger relationship with parental involvement ($\beta = 0.626$) than did perception of overprotection ($\beta = 0.240$).

Table 3

Summary of multiple regression analysis between parental involvement, perception of care, and perception of overprotection

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>36.439</td>
<td>12.664</td>
<td>0.051</td>
<td>0.005</td>
</tr>
<tr>
<td>Gender</td>
<td>1.992</td>
<td>2.678</td>
<td>0.051</td>
<td>0.458</td>
</tr>
<tr>
<td>Birth order (oldest)</td>
<td>5.433</td>
<td>2.512</td>
<td>0.143</td>
<td>0.032</td>
</tr>
<tr>
<td>Anticipated GPA</td>
<td>-7.145</td>
<td>2.850</td>
<td>-0.169</td>
<td>0.013*</td>
</tr>
<tr>
<td>Care</td>
<td>1.841</td>
<td>0.223</td>
<td>0.626</td>
<td>0.000*</td>
</tr>
<tr>
<td>Overprotection</td>
<td>0.612</td>
<td>0.194</td>
<td>0.240</td>
<td>0.002*</td>
</tr>
</tbody>
</table>

Note. * indicates significant coefficient after Holm-Bonferroni correction; $B$ = unstandardized regression coefficient; $SE_B$ = Standard error of the coefficient; $\beta$ = standardized coefficient

Research question 4

A regression analysis was carried out to explore the relationship between parental involvement and college self-efficacy while controlling for other variables that were theoretically and empirically selected covariates. The model consisting of parental involvement, gender,
anticipated GPA, class standing, perception of care, perception of overprotection, and college self-efficacy was significant, $F(6,144) = 9.134, p< 0.001$. The overall model had an adjusted $R^2$ of 24.5%, which is a moderate effect size, meaning that the variables in the model explained 24.5% of the variability in college self-efficacy. After the Holm-Bonferroni correction was executed, the only significant predictors were anticipated GPA, and class standing. This means that for every increase of 1 point on GPA, college self-efficacy can be predicted to go up by about 21 points, and for every successive year at college, college self-efficacy could be predicted to increase by about 6 points.

In conclusion, parental involvement did show a negative relationship with college self-efficacy as expected, but was not a significant predictor.

Table 4

*Summary of multiple regression analysis between parental involvement and college self-efficacy*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_B$</th>
<th>$\beta$</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>58.415</td>
<td>18.757</td>
<td></td>
<td>0.002</td>
</tr>
<tr>
<td>Gender</td>
<td>4.284</td>
<td>3.831</td>
<td>0.082</td>
<td>0.265</td>
</tr>
<tr>
<td>Year in college</td>
<td>6.192</td>
<td>1.596</td>
<td>0.279</td>
<td>0.000*</td>
</tr>
<tr>
<td>Anticipated GPA</td>
<td>21.054</td>
<td>4.135</td>
<td>0.376</td>
<td>0.000*</td>
</tr>
<tr>
<td>Care</td>
<td>0.565</td>
<td>0.383</td>
<td>0.145</td>
<td>0.142</td>
</tr>
<tr>
<td>Overprotection</td>
<td>-0.145</td>
<td>0.286</td>
<td>-0.043</td>
<td>0.612</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>-0.142</td>
<td>0.116</td>
<td>-0.107</td>
<td>0.225</td>
</tr>
</tbody>
</table>

Note. * significant after Holm-Bonferroni correction; $B =$ unstandardized regression coefficient; $SE_B =$ Standard error of the coefficient; $\beta =$ standardized coefficient

**Qualitative analyses**

The sample of college students in this study consisted of a majority of white females between the ages of 18 and 24 years. Most of them were either the oldest child in their family or
the youngest. With respect to class standing, each year in college was roughly equally represented. Participants majored mostly in social sciences or in liberal arts. These respondents filled out a qualitative questionnaire in addition to the quantitative measures.

Each of the four qualitative questions was examined for patterns that showed students’ attitudes toward parental communication. The questions as well as responses were direct and concise, facilitating their interpretation and categorization.

*Advantages of parental communication*

The first question asked the students to talk about any perceived benefits of parental communication during college. The main overarching theme that emerged from the responses was that of support, both emotional and financial. Students considered their parents to be a strong support system and they felt that their parents would always be there for them. Some examples that reflect this belief are:

“Parents are a strong support system. I never worry that I'll be broke or homeless. I know they are there for me whenever I need them physically or emotionally. They would drop everything for me.”

“Support and help from parents makes it easier to get through college.”

“You always have someone to talk to, and someone whom you can trust with anything.”

“Getting love, support, and money.”

Students believed that having frequent communication with parents during college helps them feel connected to life back at home. It helps in maintaining a loving, open and healthy relationship between parents and children:

“It helps you stay connected when you go away to school. They are there to talk to when you are lonely and you can keep tabs at home and they can keep tabs on you.”
“Being away for school brought me and my mom closer. Since we don't see each other as often, our only form of communication is via telephone.”

“Having the ongoing social bond with them that will hopefully last a lifetime. You want to have them feel included and up to date with what you're up to while at school, which will keep them happy, in turn making you comfortable and happy.”

“It allows for constant support. It allows for a connection to home. Relationship with parents becomes stronger through frequent communication.”

The responses also showed that students value parental advice almost as much as parental support. Students rely on their parents for advice because they believe that parents have greater experience and wisdom:

“Having someone older who has gone through things and can give you advice.”

“They provide opinions that they feel are in your best interest.”

“Good communication with parents helps you in different life experiences. They have gone through everything I will go through so they can help me.”

“They offer advice by drawing on their own experience. They know you better than a lot of people in some ways.”

“Having frequent communication with parents is a must. You get moral, academic and overall good life tips.”

*Parenting behaviors not covered by the Parental Involvement scale*

The purpose of the second question was to explore any additional parental behaviors that the students have experienced during college. This was important in order to get a better and
more accurate picture of parental involvement during college, and to provide a general estimate of the completeness of the Parental Involvement scale. A majority of the respondents indicated that there was nothing more to add to the scale. A few participants mentioned that their parents missed them now that they were away from home. Some even reported being made to feel guilty about not visiting home enough, while others felt that their parents were worried and concerned about them:

“Parents seem more affectionate on the phone because I’ve been away.”

“They seem sad that I am not always around. I get even more spoiled when I see them.”

“My parents would drive 3-4 hours just to see me and make sure I have food. They miss me.”

“Making me feel guilty for leaving home.”

Some students also perceived their parents as being more relaxed now that the children were adults. They felt that their parents gave them more freedom and independence and that they had a closer and more mature relationship.

*One occasion where parental communication was helpful*

For the third question, participants were asked to talk about any one occasion where they were pleased to have communication from their parents. The most common theme that emerged from these responses was that of emotional support received in various forms like encouragement, advice, and a connection with home. Most students were happy to hear from their parents in times of stress, including academic and personal problems. A few responses also indicated that students were relieved or happy when they received tangible help from their
parents. Some students also said that they like talking to their parents regularly just to keep in touch. The following examples illustrate some of the occasions when students welcomed parental communication:

“When I'm stressed out, I call my parents. They can calm me down and remind me that it's not the end of the world.”

“I talk to my parents every day and I am always pleased to see what's going on in their life and for them to see what's going on in mine. I feel loved and supported.”

“They helped me when I needed money to buy text books.”

“Printer broke and dad gave instructions on how to fix it.”

“When I was worried I would fail, they helped me make a plan to succeed and save my GPA.”

“When I was having difficulty getting over my ex, my mom helped me, gave me great advice, which made me feel better.”

“Filling out paperwork for FAFSA. Birthdays.”

One occasion where parental communication was not helpful

Finally, in response to the fourth question students wrote about an occasion when they were unhappy to communicate with their parents. Many students reported that there had been no such occasion. Other responses indicated that parental communication on such occasions was inconvenient, nagging (mostly academic), unproductive, and sometimes an additional stress for the students; as evidenced by the following responses:

“Parents called when I was in the middle of writing an essay.”
“Stress me out when I am already stressed about finals. Puts more pressure on me.”

“When I called my mother to tell her I got a job, the conversation led to her complaining about my younger brother. It stressed me out and took over an hour of time.”

“When my parents call to give their opinion on something they do not always know about.”

“My mom asked multiple times how one class was because she is interested in the topic. I wasn't interested in it, so it was annoying. I dropped that class.”

Overall, the open-ended responses helped provide an important insight into students’ beliefs about maintaining frequent contact with their parents during college. Most students seem to value their parents’ input in many situations. Both parents and children wish to stay in touch during the college years. For most, frequent communication is a significant aspect of a close, emotional bond between parents and their children. Even though there are occasions where students do not agree with their parents, they still value the overall communication pattern and the relationship itself.

Chapter 5: Discussion

This study was designed to explore the characteristics of parental involvement in the lives of college students, student perceptions thereof, and its relation to college self-efficacy. The open-ended questions in this study were useful in aiding understanding of the phenomenon of parental involvement during college from the children’s perspective. These questions helped reveal what students feel about staying in touch with their parents. Students’ perceptions and attitudes toward parental involvement in their own words enriched the interpretation of numerical data gathered in this study. The responses to these questions also corroborated the
results of the quantitative analyses. Overall, the results support the popular notion that college students and their parents do, in fact, communicate frequently. The nature of parental involvement, however, does not appear to be as alarming as is often portrayed by anecdotal sources. These sources often report that parents of undergraduates are “overparenting” by being intrusive, controlling and micromanaging – characteristics referred to as “helicopter” parenting. Students’ perceptions of parenting also indicated that parental involvement is associated with care more than it is with overprotection. Finally, this study did not provide strong support for the concern that parental involvement might be threatening students’ college self-efficacy.

The purpose of the first research question was to describe the parental involvement that college students experience. This was important because previous literature has not provided comprehensive or detailed descriptions of parental involvement in young adult children’s lives. The Parental Involvement scale created for this study was intended to examine the scope of parental involvement by asking about specific parental behaviors that college students encounter. The findings were consistent with the limited literature on this topic (Chen, & Katz, 2009; Hofer, 2008), showing that a majority of college students and parents maintained close ties and frequent communication. In addition, the detailed list of parental behaviors also helped differentiate between the types of parental involvement experienced during the college years. Results suggest that most parents and children communicate in order to stay connected. The students in the current study considered their parents to be their support system and relied on them for encouragement, guidance, and also for friendship. Occasions where parents micromanaged their children’s lives or acted on their behalf were rare and not the norm. In fact, the participants in this study reported that they rarely or never experienced parental behaviors that interfered with
their academics or campus life (e.g., “Attended classes with you”, “Contacted your roommate on your behalf”).

The excellent reliability score of the Parental Involvement scale indicated that it was a good instrument that captured the essence of the construct of parental involvement in college students’ lives. The Parental Involvement scale could be an important tool to assess the nature and extent of parent-child communication during college. An attempt was made to include many possible parental behaviors – from those that are interfering and micromanaging (attending classes with an adult child, solving adult children’s roommate problems) to those that are supportive and friendly (e.g., telling someone you love them, offering encouragement). The wide range of behavior descriptions in this scale made it possible to differentiate between various forms of parental involvement. Students were also asked in an open-ended question about any parental behaviors that could be added to the scale. A small number of students suggested additional behaviors, and this information will be useful in modifying the scale for any future research.

The second research question was designed to further differentiate the features of parental involvement based on student characteristics. Consistent with the limited prior research (Hofer, 2008; Pizzolato, & Hicklen, 2011), this study also found no significant differences in the amount of parental involvement with respect to students’ gender, class standing, birth order, parental education, ethnicity, and GPA. This suggests that frequent parent-child communication during college is not limited to any specific groups of students, and that college students generally stay in touch with their parents.

In response to the third research question, data revealed that parental involvement during college was positively related to perceptions of both dimensions of parenting – care and
overprotection/control. This means that students who perceived parenting to be caring as well as those who perceived it as controlling, reported greater parental involvement. This finding is not surprising given that prior research has found that such parental involvement during college has elements of authoritarian, authoritative, and permissive parenting (Padilla-Walker, & Nelson, 2012). What was different in the current study, however, was that parental involvement had a much weaker relationship with perception of overprotection/control, and a stronger association with perception of care. In conjunction with the qualitative responses, it was evident that these students perceived their parents to be caring, helpful, and trustworthy, and therefore valued their involvement. According to Padilla-Walker and Nelson (2012), “helicopter parents” engage in controlling behaviors, but also provide high levels of warmth, support and love to their college going children. The findings of the present study might suggest a different interpretation of those results which is that parents continue their involvement in the lives of their children during college, perhaps motivated by the desire to provide emotional support, guidance, and help, while also very occasionally displaying controlling/overprotective behaviors. Controlling behaviors appear to be a minor aspect of the overall supportive and caring parenting.

This strong association between parental involvement and perceived care is in contrast with the popular notions of “helicopter” parenting. Popular media sources tend to portray college students as “victims” of controlling parents (English, 2009; Shaffer, 2010). There is an implicit assumption that these young adults are resentful of such parental behavior, but are perhaps powerless to stop it. The current study found virtually no evidence of controlling, developmentally inappropriate, or micromanaging parental behaviors, as indicated by the responses on the Parental Involvement scale and the open-ended questions. The respondents also did not appear to be mere recipients of parental involvement. They not only seemed to be happy
to communicate frequently with their parents, but also solicited and depended upon parental support and advice.

Research that has studied the effects of “helicopter” parents on college students’ psychological well-being (LeMoyne & Buchanan, 2011; Schiffrin et al., 2013) has also implicitly assumed that parents of college students are overbearing and that the students are dissatisfied with such parental involvement. This assumption is reflected in the questions that researchers have asked in their studies. They have used items that only measure intrusiveness or the controlling behaviors of parents without including items that reflect that parents could also be providing warmth, encouragement, support, or care. The responses on those scales can only indicate the presence or absence of controlling parenting, but not whether supportive and friendly parenting occurs alongside. The items on the Parental Involvement scale in the current study were designed to address this particular issue and refer to both positive and negative parenting behaviors, in light of the findings by Padilla-Walker, and Nelson (2012), that found “helicopter” parenting to be high in both, care and control.

The scale used in this study was designed to measure “parental involvement” instead of “helicopter” parenting which has a negative connotation. In using the more neutral term, it was assumed that parental communication during college cannot be “helicopter” parenting in and of itself, especially considering the results by Padilla-Walker, and Nelson (2012). The content of the communication should be investigated to find out whether there are indeed elements of love, support, warmth, and care present in the relationship, as claimed by Padilla-Walker, and Nelson (2012). Therefore, items that sound trivial but nevertheless indicate support and warmth (e.g., “Told you they love you”, “Cheered you up”, etc.) were also included in this new scale. The inclusion of positive aspects of parenting resulted in a broader scale.
The Parental Involvement scale and the open-ended questions created for this study were helpful in giving a clearer, comprehensive picture of parental involvement in college students’ lives. The responses indicated that most parent-child communication during college is centered around love, support, encouragement, and care.

The current study found parental involvement to be negatively related to students’ GPA. As mentioned earlier, “helicopter” parenting during college has elements of authoritative, authoritarian, and permissive parenting (Padilla-Walker & Nelson, 2012). An authoritative parenting style (consisting of support, warmth, demandingness) has been generally shown to predict better academic outcomes for adolescents (Steinberg, Mounts, Lamborn, & Dornbusch, 1991) as well as for undergraduates (Strage & Brandt, 1999). By contrast, authoritarian parenting (marked by excessive control) is generally associated with poorer academic performance among college students (Wintre & Yaffe, 2000). The negative relationship between GPA and parental involvement in the present investigation, however, cannot be attributed to authoritarian parenting with certainty. This finding can be understood better with the help of the open-ended responses. Based on the reports of this sample, there is reason to believe that those respondents having a lower GPA were soliciting help from their parents, either as academic advice, or simply as encouragement, as evidenced by a higher score on parental involvement. An example of this is where a student has reported that she along with her parents came up with a plan to save her falling GPA and the strategy succeeded. Other participants have mentioned similar situations about stress and worry about failing grades where their parents helped them to calm down, and offered support and encouragement. For these reasons, a negative relationship between parental involvement and GPA could be indicative of supportive parents.
The aim of the fourth research question was to examine the extent to which college self-efficacy was related to parental involvement. Based on available research (van Ingen et al., 2015) that shows “helicopter” parenting during college to be negatively related to general self-efficacy, it was predicted that students who report greater parental involvement would have a lower college self-efficacy. The results of the present investigation supported the negative direction of the relationship but were not statistically significant. One explanation for this non-significant finding could be that the present study used a broader construct of parental involvement (that included appreciated as well as unnecessary involvement) instead of “helicopter” parenting. The Parental Involvement scale included supportive, caring, and friendly parental behaviors along with intrusive, micromanaging, and controlling behaviors. Support and nurturance (components of an authoritative parenting style) have been shown to relate positively to self-efficacy beliefs, among adolescent student populations (Hoeltje et al., 1996; Juang & Silbereisen, 1999) with the relationship continuing into the college years (Strage and Brandt, 1999). The participants in this study reported that they relied on their parents for support and encouragement. The support offered by parents might act as a persuasion mechanism which boosts students’ self-efficacy beliefs (Bandura, 1986) by helping them believe in their own capability. Another related source of self-efficacy is vicarious experiences of social models (Bandura, 1986). The respondents in this study appeared to consider their parents as relevant models for guidance, as evidenced by the qualitative findings. Students believed that their parents could guide them based on their own life experiences. The skills and strategies learned from parents could add to the self-efficacy beliefs of these young adults. Many students mentioned that they turn to parents whenever they are stressed, and that talking to parents helps them calm down. Thus, parental communication could also be a factor in reducing participants’ stress and anxiety levels, resulting in increased self-
efficacy (Bandura, 1986). Therefore, the participants may have experienced concurrently, parental behaviors that hindered and other parental behaviors that facilitated the development of their self-efficacy. This combination may explain the lack of a significant relationship between parental involvement and college self-efficacy.

Another explanation for the non-significant relationship between parental involvement and college self-efficacy might simply be that parental involvement ceases to be a significant predictor of young adults’ self-efficacy in the presence of more powerful predictors – academic performance and year in college. Better academic performance has been consistently linked with a higher sense of self-efficacy in college (Brady-Amoon & Fuertes, 2010; Chemers, Hu, & Garcia, 2001; Mattern & Shaw, 2010; Turner, Chandler, & Heffer, 2009). Even though a definite directionality between GPA and self-efficacy cannot be established, it is reasonable to assume some cyclical relationship between the two (Turner, Chandler, & Heffer, 2009), whereby a stronger self-efficacy predicts better academic performance, and a higher GPA further contributes to self-efficacy. More experience in college, as indicated by class standing, also significantly predicted college self-efficacy in the present study. This supports the rationale that students could be gaining more mastery experiences (Bandura, 1986) with college related tasks with every passing year, contributing to a higher sense of self-efficacy for those tasks. Class standing and GPA were both significant predictors of college self-efficacy in this study, thereby reducing the contribution of parental involvement.

Advantages of parental communication during college

In their open-ended responses, participants mentioned that communicating with parents during college brought them many advantages such as receiving emotional support from them, maintaining a connection with life at home, and sharing experiences with parents. Students also
reported that frequent communication with parents builds trust and maintains healthy relationships. These themes are strikingly similar to those discovered by Chen and Katz, (2009) in a study that used focus group interviews with 40 undergraduates. The researchers found that college students considered the mobile phone to be absolutely necessary to maintain contact with parents. They communicated frequently with parents in order to stay connected, ask for help, share experiences, fulfill family roles, and receive emotional support. In addition, the present study also showed that college students look up to their parents because of their experience and wisdom. This was an additional detail that was detected in this study.

*Occasions where parental communication is welcome*

Open-ended responses also indicated that most participants were happy or relieved when they heard from their parents in times of stress. Whenever these students had academic, personal, or financial problems, they liked to communicate with their parents. The type of support offered by parents was mostly advice, emotional comfort, or tangible support, and most parents did not intervene and try to solve their child’s problem themselves. The present study showed that some students with serious mental health problems tended to reach out to their parents. For example, one student mentioned that talking to her parents helped her immensely when she was suffering from clinical depression for some time during college. Another participant has also reported that a call from home helps when she has bouts of depression. This offered a different insight into the relationship between parental involvement and mental health issues of college students than that reported by some researchers (LeMoyne & Buchanan, 2011; Schiffrin et al., 2013; Segrin et al., 2013). Contrary to the interpretations of these studies which implied that parental involvement may predict mental health issues, the link between parental involvement and students’ psychological well-being could have alternative explanations. It is quite possible that many
students who suffer from mental health problems in college could be relying on parents for emotional support and receiving such support. Further research in this area is warranted.

**Occasions where parental communication is not desirable**

Most participants in this study said that there was never an occasion when they disliked having communication with their parents. Among those few who did experience such occasions were those who reported that parents called at an inconvenient time. Still others felt that talking to parents on some occasions was simply frustrating because parents did not necessarily understand the children’s viewpoints. This was especially an issue where the parents had never gone to college themselves and therefore did not understand the pressures. For example, one student mentioned that parents seemed distant because they did not understand student loans. So, for these participants, not getting the necessary support and encouragement from parents was stressful and unproductive. This supports research about first generation college students and the role their parents play in their college experience (Bryan, & Simmons, 2009). Communication with parents added to some students’ disappointment after a bad academic performance. Instead of getting support from their parents, they only received additional nagging or an advice to “get over it”. Participants also found it annoying when parents complained to them about problems back at home. A few students felt that it was inappropriate when parents continued to monitor them by asking about their whereabouts constantly.

**Changing trends**

This study found that most college students have a favorable attitude toward parental communication. No significant differences were found in the acceptability of parental involvement across students based on characteristics such as gender, year in college, ethnicity,
and other demographic factors. These and similar other findings (Hofer, 2008) suggest that frequent communication with parents might be the new norm. Technology appears to be the biggest facilitator of this new trend by enabling instant contact and by providing new platforms like social media networks. Based on the responses in this study, the nature of parent-child communication in college appears to be benign, with some rare exceptions of micromanaging or intrusive behaviors.

**Summary**

To recapitulate, college students in this sample mostly enjoyed having frequent communication with their parents, consistent with prior research (Hofer, 2008). They were confident that their parents would always care about them. College students and their parents shared a close bond. Minor disagreements or annoyances in the relationship did not seem to affect the desire to stay connected. Contrary to anecdotal or media reports (English, 2009; Shaffer, 2010), instances where parents “baby” their adult children, intervene in academic or campus life, or where college students themselves expect parental intervention were rarely reported in this study. One explanation for this difference could be that media reports and other anecdotal sources typically ask a few selected people to voluntarily submit their observations of helicopter parenting (see Shaffer, 2010) resulting in a potential sampling bias. Most people usually report one or two instances of the phenomenon and these examples could serve as confirmation bias (see Shaffer, 2010).

**Limitations of the study**

Even though attempts were made in order to ensure a diverse sample, it was not a random sample. Selection of classes for survey administration ultimately depended upon instructor
consent, and the schedule of the researcher. The sample consisted of more females than males, and most participants were White Caucasian. Also, as participation was voluntary, it is likely that only those students who were interested in the topic, or those who shared a good relationship with their parents, decided to participate. These factors could potentially limit the validity and generalizability of the results.

As this was a study done at one point in time, factors such as participants’ mood, levels of enthusiasm, etc. at the exact time of survey might have influenced their responses. For example, if a student had had an argument with their parents sometime before the survey, their responses might have reflected a hostile perception of parenting. Such extraneous factors beyond the control of the researcher must be acknowledged.

The Parental Involvement scale was newly designed by the researcher for this study. Even though it demonstrated very good internal consistency reliability, it will need further refinements and testing with different samples and in conjunction with other established instruments to ascertain its validity and utility. A factor analysis of the Parental Involvement scale could be helpful to understand if there are different dimensions to the scale. Different factors such as care and control (if found) could also explain the unclear findings with respect to college self-efficacy. For example, the items on the care factor of the Parental Involvement scale might be related to higher self-efficacy, while those on the control factor might be associated with lower self-efficacy. While the open-ended questions did provide reasonable insights into participants’ beliefs and attitudes about parental involvement, it must be pointed out that the questions only asked about a single instance each of helpful and unhelpful parental communication. There could certainly be more examples of undesirable as well as desirable parental behaviors experienced by the students.
Practical implications

This study underlined the role of young adult children’s perceptions of parental involvement in their lives. The responses indicated that a majority of students considers parents as a support system and relies on them for advice and encouragement. Previous literature about parental involvement and undergraduates’ psychological issues (LeMoyne & Buchanan, 2011; Schiffrin et al., 2013) has not taken this factor into account. Professionals who deal with college students’ well-being would benefit from using a cautious approach in this matter, keeping in mind that parents could be enlisted as a helpful resource for students who experience psychological problems such as stress, anxiety, depression, etc. This study also found no firm evidence that parental involvement relates to students’ college self-efficacy. Therefore, it is possible that parental involvement is beneficial to some students’ college self-efficacy, and inconsequential to others, such as those who have a higher academic performance or a higher class standing. Some personality characteristics of the students also might play an important role in the parental involvement they solicit and receive. For example, students who are prone to be anxious and stressful might rely on parental encouragement and support to help them cope with their feelings.

Directions for future research

Further study of the Parental Involvement scale would increase the contribution it could make to the study of the nature of parent-child communication during college. Factor analysis would be especially helpful as it might help differentiate between various parenting behaviors across dimensions like care, control, and the type of help offered. For example, research could investigate whether factors of parental care and parental control relate differently to self-efficacy of students, or if those factors have different relationships with students’ GPA. The Parental
Involvement scale should also be used to survey various diverse samples of college students to further assess its validity. Suggestions from participants will also help add, modify or remove any parental behaviors in the scale. Testing this scale against established measures of parenting and other related instruments would also be helpful in establishing convergent and divergent validity.

Longitudinal research or cross sectional studies with participants of different age groups would help understanding of the issue of continued parent-child communication and relationship during the adult years. Specifically, it could help clarify whether parental involvement continues throughout the life of the adult children, whether there are different child outcomes in different age groups, and whether parental involvement is associated with beneficial, harmful or neutral factors across age groups.

It also remains to be seen whether such parental communication and involvement occurs among families where the children do not go to college and instead enter the workforce. People who start working full time instead of going to college might not remain financially dependent on their parents, and some might also start a family life of their own thereby having a different support system to rely on.

While this study found no significant relationship between parental involvement and college self-efficacy of adult children, future studies could focus on other types of self-efficacy beliefs, as self-efficacy is a very task-specific construct. Factors such as emotional well-being, mental health issues of college students (in relation to the parenting that they receive) also need to be studied differently. A qualitative approach in conjunction with quantitative methods might provide important insights into the directionality of the relationship between parental involvement and these psychological issues.
Conclusion

Despite limitations, this study contributes to the emerging field of parent-student contact during college by suggesting a wider view of what parental involvement might mean. It introduces a new measure to assess parental involvement during college and also explores students’ perceptions of parenting. The findings suggest that parents are an important support system for most college students and it would be beneficial for researchers not to overlook this aspect of the parent-child relationship.
References


Appendix A
Data plots for determination of linearity

![Data plot 1](image1)

![Data plot 2](image2)
Appendix B

Holm-Bonferroni adjustment table for Research question 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value (ascending order)</th>
<th>Holm-Bonferroni</th>
<th>New p-value limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated GPA</td>
<td>.019</td>
<td>0.05/9</td>
<td>0.0055</td>
</tr>
<tr>
<td>Gender</td>
<td>.032</td>
<td>0.05/8</td>
<td>0.0062</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.071</td>
<td>0.05/7</td>
<td>0.0071</td>
</tr>
<tr>
<td>Birth order (oldest)</td>
<td>.102</td>
<td>0.05/6</td>
<td>0.0083</td>
</tr>
<tr>
<td>Father’s education</td>
<td>.320</td>
<td>0.05/5</td>
<td>0.0100</td>
</tr>
<tr>
<td>Birth order (only)</td>
<td>.485</td>
<td>0.05/4</td>
<td>0.0125</td>
</tr>
<tr>
<td>Mother’s education</td>
<td>.589</td>
<td>0.05/3</td>
<td>0.0166</td>
</tr>
<tr>
<td>Year in college</td>
<td>.659</td>
<td>0.05/2</td>
<td>0.0250</td>
</tr>
<tr>
<td>Birth order (middle)</td>
<td>.889</td>
<td>0.05/1</td>
<td>0.0500</td>
</tr>
</tbody>
</table>

Holm-Bonferroni adjustment table for Research question 3

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<tr>
<th>Variable</th>
<th>p-value (ascending order)</th>
<th>Holm-Bonferroni</th>
<th>New p-value limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care</td>
<td>.000</td>
<td>0.05/5</td>
<td>0.0100</td>
</tr>
<tr>
<td>Overprotection</td>
<td>.002</td>
<td>0.05/4</td>
<td>0.0125</td>
</tr>
<tr>
<td>Anticipated GPA</td>
<td>.013</td>
<td>0.05/3</td>
<td>0.0166</td>
</tr>
<tr>
<td>Birth order (oldest)</td>
<td>.032</td>
<td>0.05/2</td>
<td>0.0250</td>
</tr>
<tr>
<td>Gender</td>
<td>.458</td>
<td>0.05/1</td>
<td>0.0500</td>
</tr>
</tbody>
</table>

Holm-Bonferroni adjustment table for Research question 4

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value (ascending order)</th>
<th>Holm-Bonferroni</th>
<th>New p-value limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipated GPA</td>
<td><strong>0.000</strong></td>
<td>0.05/6</td>
<td>0.0083</td>
</tr>
<tr>
<td>Year in college</td>
<td><strong>0.000</strong></td>
<td>0.05/5</td>
<td>0.0100</td>
</tr>
<tr>
<td>Care</td>
<td>0.142</td>
<td>0.05/4</td>
<td>0.0125</td>
</tr>
<tr>
<td>Parental involvm</td>
<td>0.225</td>
<td>0.05/3</td>
<td>0.0166</td>
</tr>
<tr>
<td>Gender</td>
<td>0.265</td>
<td>0.05/2</td>
<td>0.0250</td>
</tr>
<tr>
<td>Overprotection</td>
<td>0.612</td>
<td>0.05/1</td>
<td>0.0500</td>
</tr>
</tbody>
</table>
Appendix C

UNIVERSITY AT ALBANY
State University of New York
Institutional Review Board (IRB)
Informed Consent Information
for Participation in a Research Study

<table>
<thead>
<tr>
<th>Protocol (Study) Number</th>
<th>15-E-281-61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Title</td>
<td>An overview of college students’ perceptions of parenting and their college experience.</td>
</tr>
<tr>
<td>Study Principal Investigator Name</td>
<td>Deepti Marathe</td>
</tr>
<tr>
<td>Study Principal Investigator Phone #</td>
<td>413-303-1455</td>
</tr>
<tr>
<td>Study Principal Investigator Email address</td>
<td><a href="mailto:dmarathe@albany.edu">dmarathe@albany.edu</a></td>
</tr>
</tbody>
</table>

Introduction

You are being asked to participate in this research study so that...students can gain benefit of observing first hand the process of research, your responses will help refine the surveys, and the responses taken collectively will help inform the field of Educational Psychology in a meaningful way.

Why is this study being done?

This study is being done to understand better some experiences of college students including parenting and the overall college life. This study is for student research purposes and you need to be at least 18 years old to participate.

What are the study procedures? What will I be asked to do?

You will be asked to fill out a survey packet that includes some general information about yourself, 3 specific questionnaires, and some open-ended questions. Participation in this study is voluntary.

How long will it take?

It is anticipated that it will take you about 20 minutes to complete the survey.

What are the risks or inconveniences of the study?

There are no anticipated risks of this study. In case some questions cause you mild discomfort, you may choose to skip them or even stop answering completely.

What are the benefits of the study?

You will be able to experience first hand how research is done, and your answers will help to advance the scientific understanding in the field of parenting of college students.

Will I receive payment for participation? Are there costs to participate?

There is no payment for participation. There are also no costs to participate in this study.

How will my personal information be protected?

Page 1 of 2
No identifying information will be collected from you. There is no way to link the responses to the participant.

All information obtained in this study is strictly confidential unless disclosure is required by law. In addition, the Institutional Review Board, the sponsor of the study (e.g. NIH, FDA, etc.) and University or government officials responsible for monitoring this study may inspect these records.

Can I stop being in the study and what are my rights?

You should also know that participation in research is entirely voluntary. Even after you agree to participate in the research, you may decide to leave the study at any time without penalty or loss of benefits to which you may otherwise have been entitled. You should also be aware that the investigator may withdraw you from participation at his/her professional discretion. You may choose not to answer any questions and may refuse to complete any portions of the research you do not wish to for any reason. If you do not wish to participate, hand in a blank questionnaire.

Whom do I contact if I have questions about the study?

Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this project or if you have a research-related problem, you may contact the principal investigator.
Principal investigator – Deepti Marathe (Graduate Student, Department of Educational Psychology and Methodology), 413-303-1455, damarate@albany.edu
Faculty advisor – Dr. Joan Newman, Associate Professor, ED 233- Department of Educational Psychology and Methodology, 518-442-5055, jnewman@albany.edu

Whom do I contact if I have questions about my rights as a study participant?

Research at the University Albany involving human participants is carried out under the oversight of the Institutional Review Board (IRB). This research has been reviewed and approved by the IRB. If you have any questions concerning your rights as a research subject or if you wish to report any concerns about the study, you may contact University at Albany Office of Regulatory & Research Compliance at 1-866-857-5459 or hsoconcerns@albany.edu.

You will be given a copy of this document to keep.
Appendix D

Parental Involvement scale

Since you started college, please indicate HOW OFTEN your parents have done the following for you:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Never</th>
<th>Once or twice</th>
<th>Sometimes</th>
<th>Often</th>
<th>Very often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Called you with a wake-up call</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Helped you with day-to-day chores such as laundry</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Helped you with transportation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Attended classes with you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Contacted a professor regarding your work or grades</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Provided encouragement in a difficult situation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Planned certain activities for you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Asked for a copy of your course syllabus</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Helped with course assignments/projects</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Reminded you of an upcoming test/paper</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Contacted your resident advisor on your behalf</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Gave you ideas about solving an issue</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Called you to see how you were doing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Took care of a problem for you before it arose</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Contacted your roommate’s parents about an issue</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Talked to you about your college life</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Talked to you about your boyfriend/girlfriend/date</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Expressed concern if they didn’t hear from you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Tried solving a problem for you as soon as they heard about it</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Played an active role in the selection of your career/major</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Pressured you to perform well academically</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Cheered you up</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Asked about your alcohol use</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Offered suggestions on how to make friends/form new relationships</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Told you they love you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Action</td>
<td>Box 1</td>
<td>Box 2</td>
<td>Box 3</td>
<td>Box 4</td>
<td>Box 5</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Made sure you had everything you needed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sent you a gift</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sent you new clothes</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Sent you food/care package</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Used your login ID or email to conduct college business for you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Edited a course paper for you</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Contacted your roommate about an issue you had</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Parental Bonding Instrument

The following questions list various attitudes and behaviors of parents. As you remember your parent(s) in your first 16 years, please place a tick mark in the most appropriate box next to each question.

<table>
<thead>
<tr>
<th></th>
<th>Very like</th>
<th>Moderately like</th>
<th>Moderately unlike</th>
<th>Very unlike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoke to me in a warm and friendly voice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not help me as much as I needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Let me do those things I liked doing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seemed emotionally cold to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appeared to understand my problems and worries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was affectionate to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liked me to make my own decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not want me to grow up</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tried to control everything I did</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Invaded my privacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enjoyed talking things over with me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequently smiled at me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tended to baby me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not seem to understand what I needed or wanted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Let me decide things for myself</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Made me feel I wasn’t wanted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could make me feel better when I was upset</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not talk with me very much</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tried to make me feel dependent on him/her</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Felt I could not look after myself unless he/she was around</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gave me as much freedom as I wanted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Let me go out as often as I wanted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Was overprotective of me</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did not praise me</td>
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<td>Let me dress in any way I pleased</td>
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College self-efficacy Inventory
The following 20 items concern your confidence in various aspects of college. On a scale of 1-10 below, please indicate how confident you are as student that you could successfully complete the following tasks.

1= Not at all confident .................................................. → 10 = Extremely confident

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<td>Make new friends at college</td>
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<td>Divide chores with others you live with</td>
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<td>Talk to university staff</td>
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<td>Manage time effectively</td>
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<td>Ask a question in class</td>
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<td>Participate in class discussions</td>
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<td>Get a date when you want one</td>
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<td>Research a term paper</td>
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<td>Do well on your exams</td>
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<td>Join a student organization</td>
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<td>Talk to your professors</td>
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<td>Join an intramural sports team</td>
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<td>Ask a professor a question</td>
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<td>Take good class notes</td>
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<td>Get along with others you live with</td>
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<td>Divide space in your residence</td>
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<td>Understand your textbooks</td>
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<td>Keep up to date with your schoolwork</td>
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<td>Write course papers</td>
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<td>Socialize with others you live with</td>
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Finally, please answer the following questions. There are no right or wrong answers.

1) In your opinion, what, if any, are the advantages of having frequent communication with parents?

2) What type of parenting behaviors (not mentioned in the survey) have you experienced since you started college?

3) Can you give an example of an occasion you were pleased to have communication from your parent? Explain why it was helpful.

4) Can you give an example of an occasion you were NOT pleased to have communication from your parent? Explain why it was NOT helpful.