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This research examined the relationships between emerging adults’ attachment to their mother and father, family communication patterns as perceived by emerging adults’, and the levels of satisfaction emerging adults’ experience in their families. Bronfenbrenner’s bioecological perspective on human development was used as a general theoretical foundation for the study, while drawing on Bowlby’s attachment theory and family systems thinking to guide specific hypotheses. 233 undergraduate students completed an online survey regarding their perceptions of their family relationships. Data were collected and analyzed at two different times, allowing for analyses with both concurrent data and six to eight week longitudinal data. Results indicate that attachment anxiety and avoidance, as well as communication patterns (i.e., open communication, conformity orientation), all uniquely relate to levels of family satisfaction for emerging adults. Communication with mother, in particular, appears to have a robust relationship with family satisfaction. In regards to attachment relationships, avoidance towards mother appears to play a larger direct role in impacting family satisfaction, while anxiety appears to play a larger direct role in the relationship with father. There was also limited evidence of an interaction between attachment and communication in predicting levels of family satisfaction.
Attachment avoidance appeared to moderate the relationship between communication with father and family satisfaction, while attachment anxiety appeared to moderate the relationship between communication with mother and family satisfaction. Detailed findings are presented and implications are discussed.
CHAPTER 1
INTRODUCTION

Emerging Adults in the American Family: Examination from a Bioecological Perspective

There has been great consensus that the American family is changing at a highly detectable rate in recent decades. There is not such agreement, however, about whether the changes are natural in our social evolution or whether these changes are signs of the impending catastrophic breakdown of the American family (Besharov, 2001). One of the visible indicators of this change is the high divorce rate that increased dramatically starting in the 1950’s and has more recently leveled-off and remained high. Numerous authors (e.g., Coontz, 2001; Minuchin, 1984) have suggested that the increasing focus on individuality, possibly mistaken to be autonomy at times, in our society has an impact on how families function and the factors that determine each individual’s experience and trajectory within his/her family. Thus, attempts to understand the factors that contribute to the individual’s experience within the family may be a worthwhile endeavor, particularly for professionals who are concerned with the psychological health of families or individuals who, inevitably, exist within a family context.

A developmental perspective might suggest that beliefs, expectations, and mental representations about relationships are learned through specific processes experienced in one’s family; and these beliefs, expectations, and mental representations may continue to influence adult relationships. A great deal of research has examined correlates and outcomes of marital satisfaction, as well as therapeutic methods to potentially improve marital satisfaction. However, much less research can be found examining correlates and processes influencing the level of satisfaction experienced by emerging adults in their family of origin. This research will aim to examine emerging adults’ experience of satisfaction within the family and will serve as an attempt to add to the literature in a number of important ways.
**Broad Aims of This Research.**

First, examining the subjective experiences of emerging adults may offer valuable insight into the ways in which specific aspects of their person-level and family-level ecology contribute to their satisfaction with important, perhaps even ‘template-establishing’, relationships in their lives. Second, research has identified various dimensions related to family functioning and individual functioning in relation to family; drawing upon organized theories of knowledge about two levels of ecology that directly interact (i.e., person-level and family-level), may allow for the prediction of one’s satisfaction based on the direction of influence expected considering an individual’s location on various factors (i.e., individual factors, family-level factors). Examining and understanding the interactional processes of these factors can conceivably allow for the assessment of one’s location in dimension space and, perhaps ultimately, the development of specific interventions designed to move the person to a location that will be better expected to lead to higher levels of satisfaction and improved family functioning.

**The Bioecological Model as a Foundation.**

This examination will remain grounded in a bioecological perspective of human development (Bronfenbrenner, 2005). Bioecological theory provides a system for the scientific study of human continuity and change in the “biopsychological characteristics of human beings both as individuals and as groups” (Bronfenbrenner, 2001, p. 6963). The tenets of this perspective relevant to the current discussion are that 1) the scientifically relevant features of an environment include both the objective properties of that environment and the subjective experience of those properties by the people living in that environment; 2) processes of complex, reciprocal interaction between a person and others in the immediate external environment (i.e., proximal processes) are the primary engines of development; and 3) an operational research
design that permits simultaneous investigation of these aspects is the process-person-context-time model (PPCT) (Bronfenbrenner).

To be clear, an examination of emerging adults’ experiences of satisfaction with family requires the simultaneous investigation of properties of the person, the context in which he/she lives (in this case the family environment), and the processes that occur between the person and others in the family environment. Thus, in an attempt to have a full understanding of each of these components, this research will draw upon Attachment Theory (Bowlby, 1969, 1988) as well as Family Systems Theory (e.g., Minuchin, 1985; Minuchin, 1974, 1984). In such a way, this research will be informed by organized theories of understanding related to individual personality development and characteristics of family environments. Also, because so little research in the area of adolescent satisfaction with family has been conducted, the empirical literature examining marital satisfaction will serve as a pool from which likely factors related to family satisfaction will be drawn. The introduction to this research will begin by discussing family relationship satisfaction, which will be followed by a discussion of specific aspects of attachment and family systems that help to set the stage for a thorough literature review leading to specific research questions and hypotheses.

**Relationship Satisfaction**

The importance of marital relationship satisfaction was concisely summarized by Myers and Diener (1995) when they stated that “broken marital relationships are a source of much self-reported unhappiness, whereas a supportive, intimate relationship is among life’s greatest joys” (p. 15). While marital relationships can be viewed as distinct from family relationships (e.g., they are generally relationships by choice, not by birth or court decision), research in the area of martial satisfaction could shed light on interpersonal processes that may be common to both types of relationships. For example, marital or couples relationship satisfaction has been found
to be predicted by a number of variables including personality traits and interactional processes. Watson, Hubbard, and Wiese (2000) found that levels of neuroticism and extraversion were consistently related to marital satisfaction. Feeney, Noller, and Ward (1997) report that aspects of spousal interaction, including communication, compatibility, attraction, intimacy, and respect, are all related to marital quality. Patrick, Sells, Giordano, and Tollerud (2007) found intimacy and spousal support as strong variables in predicting marital satisfaction. In general, the research has supported the existence of both individual and interactional variables as predictors of marital satisfaction. In addition, the combined effects of these variables have been shown to have differential effects on satisfaction. For example, although Acitelli (1996) found that specific relationship skills of one partner predicted the satisfaction of the other partner, Burleson and Denton (1997) reported that these results varied based on which partner was appraised as well as the relationship context (i.e., happy vs. distressed marriages).

Satisfaction with family relationships is important to consider in understanding the psychological functioning of emerging adults and families with emerging adults. The research that has been done on young peoples’ satisfaction with family has generally focused on associations between satisfaction with family and various developmental outcomes. For example, although adolescents are often more likely to go to peers for help, satisfaction with help from parents was more related to their psychological health and well-being than satisfaction with help from peers (Burke & Weir, 1979). More recent findings have linked family satisfaction with mental health and other important outcomes. For example, Vulić-Prtorić and Macuka (2006) report that low family satisfaction, as well as perceived father and mother rejection, was the best predictor of childhood depression (age 10-16 years). Family satisfaction has also been associated with individual psychological health of adolescents (Amerikaner, Monks, Wolfe, &
Thomas, 1995) and self-image (Burns & Dunlop, 2002). The importance of family satisfaction has also been found in minority youth samples. For instance, family satisfaction was positively related to overall successful functioning in a large sample of American Indian youth with an average age of 16 years old (Silmere & Rubin, 2006). Also, Latina adolescents’ level of family satisfaction appears to partially mediate the relation between maternal depressive symptoms and adolescent substance use (Corona, Lefkowitz, Sigman, & Romo, 2005). Despite these important findings, research investigating differential aspects and correlates of family satisfaction is minimal and is in need of further development (e.g., Henry, 1994; Perrone, Ægisdóttir, Webb, & Blalock, 2006) in order to address the admittedly sparse pool of research examining family satisfaction in comparison to the “voluminous studies on marital satisfaction” (Olson & Gorall, 2003).

Factors Contributing to Adolescent Satisfaction with the Family: The Need for Additional Research

Despite these findings and their potential importance, the specific factors and mechanisms that influence emerging adults’ experiences of satisfaction in their families remain unknown. The few studies that have directly or indirectly investigated this issue offer some insight. Peterson, Peterson, and Skevington (1986) found that the more difference of opinion there was in the relationship between a sample of Australian adolescents and their parents, the less satisfied these youth were in interactions with their parents. Jackson, Bijstra, Oostra, and Bosma (1998) found that good family communication (operationalized as high scores on the Parent-Adolescent Communication Scale (Barnes & Olsen, 1982)) is associated with satisfaction with family, as well as lack of disagreement between adolescents and parents. In a study of factors indirectly related to family satisfaction, Milevsky, Schlechter, Netter, and Keehn (2007) found that authoritative parenting style was related to higher levels of self-esteem and life
satisfaction in a sample of 9th to 11th graders. The scarcity of literature examining emerging adults’ perceptions of family life, specifically contributors to family satisfaction, suggests that more research is needed to identify individual and contextual factors that contribute to satisfaction with the family.

Based on our guiding bioecological model, we can assume that factors that contribute to an adolescent’s experience of satisfaction with his/her family are located at both the individual (person) level, the family (contextual) level, and involve the mechanisms that are characteristic of the person’s interaction with his/her family (i.e., proximal processes). Factors at these levels are theorized to contribute over time to development. Thus, we need to sift through factors or mechanisms at each level to identify those which may be expected, on either a conceptual or an empirical basis, to contribute to family satisfaction.

**Factors at the person level: Attachment theory of personality.**

Attachment Theory aims to provide a theoretical foundation to explain personality development based, in part, on interactions between a mother and her child (Salter Ainsworth & Bowlby, 1991). Based on ideas initially offered by Robert Hinde, Attachment Theory developed out of an ethological perspective aimed at describing behavior as instinctual (Salter Ainsworth & Bowlby). Thus, a close tie to one’s mother (or primary caretaker) may serve a biological function of protection and survival. In the event of danger or perceived danger, if a familiar individual who can come to our aid is in close proximity, this can increase our chances of survival. Attachment behaviors are thought to be most obvious when the person is frightened, fatigued, or sick, however, the behavior can still occur, less in evidence, at other times. Attachment can also serve to provide the individual a secure base from which to explore. If the individual feels secure that he/she can return to the protection and support of the attachment figure, exploring the environment becomes a less threatening prospect. Despite the initial
empirical focus on the interactions between and infant and mother, the influence of attachment is theorized to be present “from the cradle to the grave” (Bowlby, 1988, p. 82). The inclusion of attachment in this research model may result in furthering our understanding of the ways in which attachment influences emerging adults in relation to their parents.

The development of Attachment Theory and the initial empirical investigations using infant-mother interactions will be discussed in-depth in chapter 2. For now, it is important to simply acknowledge that the conceptual bases and methods for studying attachment in individuals long removed from infancy grew directly from research in infant-mother attachment behaviors. This early research utilized a robust observational method called the Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978), in which the proximal processes between an infant and its mother were observed. However, as a child outgrows infancy and continues to develop, there are increasingly varied means of maintaining contact within an attachment relationship (Sroufe & Waters, 1977); thus a direct observation of behaviors is no longer able to capture the attachment relationship. The measurement of attachment in older children, adolescents, and adults is assumed to rely upon the internal representation of the caregiver in the child (Sroufe & Waters). Over time, these internal representations of specific experiences become generalized into beliefs and expectations about the warmth and responsiveness of others and about the worthiness of the self (Collins, 1996). The current research focusing on emerging adults, will thus rely on the construct of working models of self and others, rather than direct behavioral observations, to examine individuals’ location on these attachment dimensions.

Working models of attachment relationships. The attachment system is an organism-level system that has been said to be organized and regulated by social input (Hazan & Shaver, 1994). As a child experiences repeated interactions with his/her caregiver, over time these
experiences are internalized in the form of cognitive working models (Bartholomew & Horowitz, 1991), and form a prototype for relationships that serve to efficiently guide thoughts, feelings, and behavior in subsequent close relationships (Collins, 1996; Hazan & Shaver, 1994). The term *working models* comes directly from Bowlby’s work in which he describes the internal representations people develop of the world and important people in it, including the self (Bowlby, 1973, 1980). According to Bowlby (1973), these internal working models of attachment have two key features: “(a) whether or not the attachment figure is judged to be the sort of person who in general responds to calls for support and protection; [and] (b) whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way” (p. 204). Thus, these working models can be assumed to serve as the basis for needs, beliefs, and expectations about close relationships and influence an individual’s subjective experience of relationships in any given moment.

**Factors at the family level: Drawing on family systems frameworks**

Structural Family Systems Theory (Minuchin, 1974) provides a conceptual framework for examining and understanding individuals and interactions within the context of families. In general terms, a view of families from a systems perspective suggests that elements within the (family) system are necessarily interdependent (Minuchin, 1985) and that relationships within the family serve as feedback systems where behaviors of one serve as stimulus and feedback for the other (Haslem & Erdman, 2003). In addition, while “systems have homeostatic features that maintain the stability of their patterns (Minuchin, 1985, p. 290), evolution and change within the (open) family system are inherent (Minuchin, p. 290), and most likely necessary and adaptive. If we are to have “respect the individual within his context, [we must have] a concern not only with the individual’s inherent and acquired characteristics but also with his interaction in the present” (Minuchin, 1974, p. 14).
Emerging adults and family systems. Lopez, Campbell, and Watkins Jr. (1988) note that, “from a family systems perspective, it is doubtful whether the young adult’s successful move toward greater independence and extrafamily involvements can occur without corresponding adjustments within the family that support this developmental initiative” (p. 402). Further, as this move takes place, various conflicts and tensions emerge within the family system that requires adaptation for successful family functioning (Wechter, 1983). In fact, times of transition are when Minuchin (1974) believes we are most able to see the true structure of a family. Aquilino (2006) suggests that emerging adulthood offers unique challenges to both the individual and the family, including the dual interplay of emerging autonomy and dependency needs. Thus, during times of transition, it is expected that well-functioning families will make necessary adaptations appropriate to the changing circumstances, and the poorly functioning families will remain embedded in habitual patterns of interaction, despite changing circumstances that call for adaptation.

The literature offers some examples of research that examines the specific life-course transition of emerging adulthood, and that also demonstrate systems characteristics relevant to families. For example, Eberhart and Hammen (2006) examined possible interpersonal predictors of depression during the transition to adulthood. They concluded that poorer family relationship quality and anxious attachment cognitions predicted onset of depressive episodes during the 2-year study period. Frey, Beesley, and Miller (2006) report that secure parental attachment was a predictor of lower levels of distress for both men and women in a sample of college students. Miller and Day (2002) identified specific communication patterns that influenced levels of suicide ideation among college students. All of these studies, as well as others that will be reviewed in Chapter 2, have in common an implicit or explicit grounding in family systems.
thinking and demonstrate ways in which systemic properties (i.e., communication, emotional attachment) can be related to individual perspectives and/or outcomes.

**The Interplay of Attachment and Family Relational Patterns: Can Emerging Adults’ Level of Family Satisfaction Be Predicted?**

Within a PPCT framework, we can apply both Attachment Theory and Family Systems Theory to explore the ways in which individual-level characteristics and family-level characteristics may contribute to one’s subjective level of satisfaction with one’s family. Specifically, Attachment Theory will allow for the examination of working models of self and other in relationships along the dimensions of avoidance and dependence. Family Systems Theory suggests that the patterns of interaction between parents and emerging adults, which reflect beliefs about family structure and expectations, create a context within which each individual operates. Viewed within the larger PPCT framework, the individual’s subjective experience with his/her family will thus be influenced by his/her individual characteristics and the interactional processes that occur within the family, as well as, perhaps, the multiplied effects of these two influences. Over time, these influences serve to shape the development of the individual and, in a reciprocal manner, his/her family.

Through this lens, this research will attempt to answer a number of questions. First, does attachment alone have a significant relationship with family satisfaction for emerging adults during a time of transition? In other words, do the attachment-related characteristics (i.e., working models) of the individual contribute uniquely to the variance observed in family satisfaction? Similarly, do perceived family communication patterns, family cohesion, and adaptability of the family each help to predict family satisfaction, and if so, is the variance accounted for shared variance, or does each contribute unique variance in the prediction of family satisfaction? Finally, do these factors, which reside at the individual and family-level
respectively, interact in such a way that the individual’s level of satisfaction with the family is moderated by the interaction of these factors?

The review of the literature that follows will present background information about these theories and their constructs, specifically as they related to emerging adults within a family context. Prior studies grounded in these theories and utilizing their constructs will shed light on the research questions and provide rationale for specific hypotheses to be tested. The results of this research have implications for future research as well as for those who provide professional services to emerging adults and their families. For example, this research will highlight ways in which factors at two different levels of an emerging adults’ ecology contribute individually, and in combination, to the subjective experience of satisfaction with one’s family. This knowledge may provide the impetus and offer directions for research examining additional factors that shape the family experience and determine levels of satisfaction in familial relationships. The results of this research may also provide an empirical basis from which to evaluate the individual within his/her family context and develop interventions that might be expected to lead to increased levels of satisfaction experienced in the family context. Regardless, this research will contribute to our understanding of the perspective of individuals in a developmental age called “emerging adulthood”, which is considered by some to be a very new social category (Arnett, 2004) that is ‘emerging’ from the evolution of our society.
Research examining aspects of family satisfaction in families and marital relationships, which has included predictors of family satisfaction, outcomes related to family satisfaction, and possible interactions with family satisfaction, has appeared sporadically throughout the literature. Regardless, some important findings involving family satisfaction have been reported (e.g., Campbell, Converse, & Rodgers, 1976; Peterson, Peterson, & Skevington, 1986). However, despite these findings and their possible implications, family satisfaction continues to be a neglected topic of research. Even less research has been devoted to examining family satisfaction during what we are experiencing in our society as a post-adolescence/pre-adulthood period, often referred to as emerging adulthood. This transitional period has become visible over the last several decades and has been described to as “a longer road to adulthood” (Arnett, 2004, p. 3). It is characterized by exploration and instability typical of the late teens and early twenties, yet also demonstrates reliance on financial, emotional, and other support involving direct interaction between an individual and his/her parent(s). As a final launching period into adulthood, this transitional time may have important implications for the life cycle of the family. It may also reveal important information about the relationships between individual level characteristics, perceptions of family-level interactions, and the ways in which emerging adults’ derive satisfaction within their family of origin.

It is clear that organization, interactional processes, and the general environment of the family impact levels of family satisfaction. It is also clear that certain personality characteristics of individuals play a role in determining satisfaction with one’s family. However, it is much less clear how these two levels of a person’s developmental ecology interact to influence the level of family satisfaction experienced by the individual. Do personal characteristics and characteristics...
of the family environment interact in predictable ways? This chapter will review findings from research examining family satisfaction, family communication, and attachment, organize these findings and their interpretations in the social ecological theoretical framework described in chapter 1, and outline the need to integrate the examination of these constructs to develop a clearer picture of ways in which the interaction of individual characteristics (i.e., attachment style) and family characteristics (i.e., family-level communication patterns) influence perceptions of family functioning and family satisfaction during a critical transitional period, emerging adulthood. This chapter will culminate with a set of research questions and related hypotheses to be tested.

**Family Satisfaction**

Despite previous findings that family satisfaction is an important variable in determining quality of life or life satisfaction, a reliable measure of family satisfaction as a construct did not appear in the literature until 1982 (Olson & Wilson, 1982). Part of the reason for the dearth of literature on family satisfaction is because of the nebulous nature of its definition and measurement. One of the few attempts at overtly describing relationship satisfaction in the literature alludes to the fulfillment of a debt and suggests that research on close relationships conceptualizes satisfaction as an assessment of how a relationship is faring according to participants’ self-reports (Koski & Shaver, 1997). Although this description may be less than satisfying, it is a reflection of the subjective nature of the term and the construct to which it refers. The determination of whether or not one is satisfied can vary from person to person, perhaps even moment to moment.

Another potential reason for the lack of research on family satisfaction during the emerging adult years is that, historically, adolescence was seen as a time when children developed autonomy and independence from their parents. Developing such autonomy was seen
as healthy and adaptive and signaled the arrival of adulthood (Steinberg, 2001). In addition, knowing that adolescents become more involved with peers as they develop autonomy and independence may lead to the erroneous belief that the emotional bond with one’s parents is decreasingly important as adulthood approaches; which in turn may have resulted in the lack of research regarding the relationship quality of emerging adults and their parents. A host of authors have suggested, however, that the emotional bond with one’s parents does not decrease so greatly as to not be important, even after the child has moved out of the parents’ home (Ainsworth, 1989; Scabini, Marta, & Lanz, 2006; Steinberg, 2001). Thus, there is a need for research on the quality of the relationship between emerging adults’ and parents. Chapter 3 will present a proposal aimed at examining numerous aspects of relationship quality between emerging adults and parents, including family satisfaction. This section will discuss the construct of family satisfaction, present a brief history of how family satisfaction has been measured in the literature, and present some research evidence suggesting that family satisfaction is an important construct in need of further investigation.

Indeed, satisfaction in close relationships has been conceptualized in numerous ways in research literature. For example, satisfaction has been variously operationalized as the number of changes spouses’ desire in their marriage (i.e., more desired changes indicate greater dissatisfaction, Neimeyer & Hudson, 1985), a reflection of the amount of distress in relationships (Koski & Shaver, 2003), levels of cohesion, adaptability, and communication in family relationships (Harter, Neimeyer, & Alexander, 1989), family well-being (Kreppner, 1995), and levels of connectedness and autonomy (Henry, Ostrander, & Lovelace, 1992). Thus, it is important to consider what aspects of family life are important for individuals at various ages in helping to determine whether or not someone subjectively experiences their family life as
satisfying. The works by Harter, Neimeyer, and Alexander (1989) and Henry, Ostrander, & Lovelace (1992) most closely resemble the sense of family satisfaction that is aimed to be captured by the current study. More specifically, this study rests on the assumption that levels of family satisfaction can be conceptualized as the subjective perception of how well the family is meeting the needs of the individual.

**Measuring Satisfaction in the Family**

Despite the limited research on family satisfaction, interesting and important findings involving the construct have been published, and researchers continue to look for new ways to measure this latent construct (e.g., the development of the adolescents’ family satisfaction scale, Qui, Luo, & Meng, 2007). However, again, part of the difficulty in interpreting the results of such research is that different measures focus on different aspects of the family satisfaction construct. The measurement of satisfaction has a sporadic history with two main veins of exploration and measurement development. The first grew out of the practice of measuring individuals’ life satisfaction and the subsequent merging with the examination of marital satisfaction; the second was developed directly from a family systems model of family functioning. Regarding the first vein of exploration and development, the methods of measuring life satisfaction developed during research in which national samples were tested in the United States in an effort to gather a clear picture of the quality of life as viewed by the American people (Cantril, 1965; Campbell, Converse, & Rodgers, 1976). At the time, researchers drew upon current measures of *well-being* and developed scales to measure *satisfaction* as an alternative (Cantril, 1965). These initial scales of satisfaction used a self-anchoring technique in which respondents were asked to imagine the “best possible…” (i.e., one end of an 11-point scale) and the “worst possible…” (i.e., the other end of the scale) and then choose a scale point that best describes their current life (Campbell, Converse, & Rodgers, 1976, p. 31). Such a
measure was used by Cantril across as series of national studies, conducted in 1959, 1964, 1971, and 1974 (Campbell, Converse, & Rodgers, 1976).

Campbell and colleagues adapted and expanded on this methodology to assess family life satisfaction by asking respondents to assess their own family life on a 7-point Likert scale ranging from “completely satisfied” to “completely dissatisfied” (p. 33). It is important to note that satisfaction with family life was assessed with a one-item measure that asks respondents to rate, “All things considered, how satisfied are you with your family life – the things you do and time you spend with members of your family”, on a 7-point scale (Campbell, Converse, & Rodgers, 1976, p. 553).

While this face-valid methodology of assessing satisfaction revealed some aspects of satisfaction within the family, the one-item nature of the measure precluded evaluation of the reliability of this measure and highlighted the need for additional measures of family satisfaction. However, despite this limitation, researchers continue to utilize one-item measures of satisfaction, which are often referred to as “global” or “general” measures of family satisfaction (e.g., Caughlin et al., 2000; Margalit, Leyser, & Avraham, 1989; Pendleton et al., 1980; Serewicz, Dickson, Morrison, & Poole, 2007). Additionally, Perrone, Ægisdóttir, Webb, and Blalock (2006) successfully combined the two global measures described above to form a two-item index with reported internal consistency alpha of .82. Others have measured family satisfaction in similar ways. Such global measures of family satisfaction leave open the distinct possibility that each participant is self-reporting on satisfaction with different aspects of their family life (perhaps even the aspects with which they are most satisfied) and thus, interpretations of results in these cases become vague at best, perhaps overestimated, and offer limited clinical
or empirical utility. Indeed, researchers have remarked on the consistently high level of satisfaction reported using such measures (Scabini, Marta, & Lanz, 2006).

A review of the literature reveals two multi-item measures used to measure family satisfaction that have emerged as the primary measures utilized in family research. The first measure, and perhaps the most commonly utilized measure of family satisfaction, the Family Satisfaction Scale (FSS; Olson & Wilson, 1982), represents the starting point for the second main vein of family satisfaction measurement. The FSS was developed based upon the Circumplex Model of family systems (Olson, 1993) and is designed to measure satisfaction with two specific aspects of family life, coherence and adaptability. More specifically, there are 8 items that load on the factor of coherence, one for each of the following aspects of coherence in the Circumplex Model: emotional bonding, boundaries, coalitions, time, space, friends, decision-making, interests and recreation. The 6 items that load on the adaptability dimension are designed to measure the following aspects of adaptability: assertiveness, control, discipline, negotiation style, role relationships and relationship rules. Although both subscales of the FSS demonstrate reliability coefficients over .83, the total scales score is the most reliable with an alpha coefficient of .92.

The other frequently used measure of family satisfaction found in the literature is an adaptation of a scale designed to measure life satisfaction, initially, and then marital satisfaction. Huston, McHale, and Crouter (1986) adapted Campbell, Converse, and Rodgers’s (1976) measure of life satisfaction to reflect satisfaction with the marital relationship. The measure was called the Marital Opinion Questionnaire and consisted of a 10-item semantic differential scale with 7 points between the two extremes (see Campbell, Converse, & Rodgers, 1976 for a detailed discussion) as well as a one-item global assessment of marital satisfaction measured on a 7 point
Likert scale. Subsequently, Caughlin et al. (2000) and a host of others (e.g., Serewicz, Dickson, Morrison, & Poole, 2007) have adapted the Marital Opinion Questionnaire to refer to the participants’ family, thus measuring family satisfaction. This measure has been reported to have a Cronbach’s $\alpha$ of .94 for the 8 semantic differential items and an internal consistency reliability coefficient of .80 between the average of the semantic differential items and the single global measure.

One final measure of note in regards to family satisfaction has been published. Although this measure appears to have construct and concurrent validity, as well as decent reliability, the measure has appeared much less often in the literature than the measures discussed above, perhaps due to its recent emergence. The Adolescent Satisfaction with Family Life Index (Henry) appeared in 1992 and is a combination of three previously used “global” measures of family satisfaction as well as 10 additional items developed by the authors to measure the extent to which participants perceive their parents and siblings to provide a family atmosphere which allows for a balance of autonomy and connectedness. The specific items are reported to be consistent with previous conceptualizations of adolescent autonomy (Henry, Ostrander, & Lovelace, 1992). The index consists of two scales designed to measure participants’ perceptions in regards to parents and siblings. The internal reliability coefficient for the subscale of interest in the current research (i.e., parent subscale) is reported to be .88 (Henry et al., 1992) and the subscale correlates significantly with the FSS (.78).

**Correlates of Family Satisfaction.**

Despite measurement issues, there is mounting evidence that family satisfaction may play an important role in maintaining relationships, determining quality of life, and influencing development and outcomes. However, research into the determinants and outcomes of family satisfaction have only begun to shed light on what individual characteristics and aspects of
family life are related to family satisfaction, particularly for emerging adults. Beginning with the initial investigations involving family satisfaction in the United States, the pathways of family satisfaction research and important outcomes leading up to the current study offer strong insights as well as limitations.

Campbell, Converse, and Rodgers (1976) conclude that family satisfaction is an important element of overall life satisfaction. Although their results were obtained from a large range of adults (ages 18 & up) some interesting findings related to the current study emerged from their work. For one, it appeared that ratings of life satisfaction showed a general trend of increasing with age. Perhaps this was a cohort effect, but this trend has been reported in later studies as well. In addition, there was a strong similarity noted between ratings of family satisfaction and marital satisfaction. This is important in the context of the current research, which is informed by research on marital satisfaction. Campbell et al. also report that aside from nonworking activities, satisfaction with family life explained the greatest proportion of variance in general well-being scores and was consistently ranked, across age groups, as an important area of life, producing the highest regression coefficient for predicting life satisfaction. Finally, it was reported that those individuals who reported feeling less close to their parents than average reported lower satisfaction with family life in general. A limitation of this set of studies is that these results do not include any data from adolescents and do not look at emerging adults as a unique category to capture.

Confirming conclusions from Campbell, Converse, & Rodgers (1976) regarding adults, Schumm and colleagues (1986) found that adolescents’ satisfaction with overall family life and satisfaction in relationships with parents were positively related to perceptions of quality of life. Adolescents in the Schumm et al. (1986) study reported the least satisfaction with family life
compared to their mothers, fathers, and younger siblings. In addition, the age of the adolescent was negatively correlated with family life satisfaction. These findings have been reported in more recent literature as well (e.g., Scabini, Marta, & Lanz, 2006). A separate study by Schumm, Bugaighis, Bollman, and Jurich (1986) reported that, for adolescents, satisfaction with relationship with parents explained the largest amount of variance (60.8%) in family satisfaction, with satisfaction with relationship between parents and with siblings accounting for only an additional combined 5.1% of the variance in family satisfaction. These results were based upon a sample of 620 families with at least one adolescent; however, the mean age of the adolescents in the study was 15.3 years and thus ignores emerging adults as a unique cohort. The authors used single items measures to capture each of the satisfaction concepts; although they offer an argument for doing so, they state that it is “self-evident that multiple item scales would be much preferred, when available” (Schumm, Bugaighis, Bollman, & Jurich, 1986, p. 58).

Despite these limitations, within the current social ecology framework, one possible implication of these findings is that emerging adults who are satisfied with their family life are more apt to see relationships within larger systems as potentially fulfilling and worth pursuing and thus may have more positive relationships with important family members, other adults outside of the family, and mentor-figures in community organizations; also, by proxy, their children may develop the same relationship values. In addition, emerging adults who are more satisfied in their relationships with their parents may be more likely to utilize their parents as sources of support and may develop more effective coping mechanisms to address the challenges of emerging adulthood. Although these possibilities remain unexplored thus far, published research does present important related findings.
Research Using Indices of Family Satisfaction.

After the publication of the Campbell, Converse, & Rogers (1976) national survey results, Olson and Wilson (1982) published the FSS which led to a proliferation of research in family satisfaction. Although prior research based on the Circumplex Model of family functioning offered some support for the model and accompanying hypotheses (i.e., families who were moderate on levels of cohesion and adaptability, based on self-reports of familial behavior, would function the best while families who were assessed to be at the extremes of the cohesion and adaptability dimensions would demonstrate clinically significant deficits in functioning (Olson et al., 1982)), two important views suggested that there needed to be a measure of family members’ feelings about their location on the Circumplex Model in addition to a measure of their self-reported location on the model. This view suggests that the family members’ feelings about their current behavior (i.e., where they are located on the model) is at least as important as their actual location on the model (Olson et al., 1982). Thus, the FSS was developed to assess family members’ feelings (i.e., satisfaction) with the perceived levels of cohesion and adaptability in their families. However, the FSS was developed as a clinical assessment tool, so empirical research using the instrument was slow to appear. Regardless, there may be implications of the views driving the development of the FSS. For example, the need for the measure suggests that there may be a discrepancy between where individuals are on the model and where they would like to be. What mechanisms might account for this sort of discrepancy? Could improvements in empirical work lead to the development of improved clinical applications regarding family satisfaction and the mechanisms that drive related perceptions and, ultimately, maintenance or transformations?

Peterson, Peterson, & Skevington (1986) were one of the first to examine family satisfaction from the perspective of adolescent subjects. They examined the intensity of conflict,
the level of opinion divergence, and the satisfaction (operationally defined as the number of benefits seen as accruing from involvement with family) of a sample of 100 Australian adolescents ranging in age from 12 to 17. They concluded that the more differences of opinion with parents reported by the adolescents, the less they were satisfied with their families. Additional studies (i.e., Burke, 1989, as cited in Henry, 1994; Olson et al., 1983) conclude that moderate levels of cohesion and adaptability are related to high levels of family satisfaction. These conclusions have been, for the most part, accepted in the family literature and often form the basis for more recent investigations into family functioning and family satisfaction. However, there remains the possibility that there are additional aspects of family life, besides cohesion and adaptability, which impact levels of family satisfaction.

Adolescent Family Life Satisfaction Index (AFLSI). In 1992, Henry, Olstrander, and Lovelace designed an instrument to assess adolescents’ perceptions of family life in order to address the gap in the literature on family satisfaction left by the continued focus on adults’ perspectives on family functioning. The content of the measure was based on the assertion that adolescents function most effectively when they are in families that successfully provide a balance between separation and connectedness (Cooper, Grotevant, & Condon, 1984; Peterson & Leigh, 1990). Thus, the scale specifically aimed to measure “the extent to which adolescents [are] satisfied with the ability of their families to provide a sense of connectedness while encouraging the development of autonomy in relationships with parents and siblings and in parents’ relationships with each other” (Henry, Olstrander, & Lovelace, 1992, p. 1225).

Building upon previous assertions that family satisfaction is related to levels of adaptability in family relationships and utilizing the newly developed scale, Henry (1994) examined adolescent perceptions of overall family system characteristics, parental behaviors, and
demographic factors in relation to adolescent family life satisfaction (which the author conceptualized as a form of adolescent adaptation). Utilizing a convenience sample of 408 adolescent students (mean age = 16), results suggested that adolescents reported greater family life satisfaction when they perceived their family system to be flexible and bonded, with regular and predictable routines. These internal family variables were much more related to family satisfaction than were demographic variables of age and family form. In addition, specific parental behaviors (i.e., support, punitivness, induction, & love withdrawal) were all related to adolescent family life satisfaction in the expected directions and suggest that perceptions of parental behaviors and support, which affect the parent-adolescent subsystem, add an important dimension to the understanding of adolescent family life satisfaction. A final finding crucial to the current study is that “these results support the idea that family connectedness provides an emotional foundation from which the adolescent can explore the world” (Henry, 1994, p. 452, italics added). One limitation with this study and it’s conclusions is that the sample of adolescents were all still of a younger age and living at home and may have not have fully engaged in the separation process as much as emerging adults might be. Thus, the specific levels of separation and connectedness that relate to family life satisfaction may differ in a sample of emerging adults during an important transitional period.

In sum, measurement of family satisfaction has revolved around domains of family functioning theorized to be related to system-level aspects of family life. The domains of cohesion and connectedness appear to reflect levels of emotional closeness in the family. The domains of adaptability and flexibility reflect the ability of the family to make necessary changes and be open to new ways of thinking/behaving. The domains separateness and autonomy reflect the degree to which individual family members feel they can hold and express ideas and self-
images that differ from other family members. Measuring the degree to which individuals are satisfied with their family as they perceive the family unit to fit into these domains is thought to capture important aspects of family functioning, particularly from the perspective of family members who fall into the emerging adult category.

**Recent Findings**

Studies published in the last decade or so that have explored family satisfaction have led to important conclusions about the construct and its relation to other individual and family variables. Amerikaner, Monks, Wolfe, & Thomas (1995) concluded that family satisfaction is related to the psychological health of adolescents. Furthermore, they postulate that it may not be the absolute level of perceived expression of emotion and conflict in the family that impact adolescents’ psychological health, but rather circumstances where emotional expression and conflict are interpreted as undermining (or supporting) existing family cohesion. They further suggest that their results do not offer support for the suggestion that clinicians spend therapeutic time focusing on expression of emotion in families, but rather on fostering clear, consistent communication patterns, including effective problem solving. Thus, examining family communication patterns as they relate to family satisfaction is in line with their interpretations.

**Family satisfaction and family communication.** Numerous studies have offered conclusions regarding family satisfaction and aspects of communication within the family. Higher levels of family satisfaction have been repeatedly linked with open communication in the parent-child relationship (e.g., Caprara, Pastorelli, Regalia, Scabini, & Bandura, 2005; Jackson, Bijstra, Oostra, & Bosma, 1998; Scabini, Lanz, & Marta, 1999; Serewicz, Dickson, Morrison, & Poole, 2007) in young to older adolescents. Scabini, Lanz, & Marta (1999) add that for older adolescents who are satisfied with their family, parents manage their hierarchical role in a clear and consistent manner, in a way that is highly interactive and that adolescents’ see their parents
as points of reference that offer support but allow them to make independent decisions. Despite
the consistent relationship between open communication and family satisfaction, most of the
studies utilize samples that do not capture the perceptions of emerging adults. Although Scabini
et al., utilized a sample that included 18 or 19 year old adolescents, the research was conducted
in Milan and it is unclear how generalizable their results are to a similar age group in the United
States. It is also unclear, based on these studies, what might account for individual differences in
the relationship between open family communication and family satisfaction. Noftle and Shaver
(2006) offer one perspective which the current research will draw upon. Specifically, they note
that in a sample of college students (age range = 18-24 years) attachment dimensions (i.e.,
avoidance & anxiety) had greater power in predicting relationship quality (i.e., satisfaction) than
did any of the Big Five personality factors. However, the relationship being assessed in this
study was a romantic relationship, rather than family relationships. Regardless, these researchers
directly implicate attachment as a relevant construct in relation to relationship satisfaction in
emerging adults.

**Family satisfaction and attachment.** Very few studies have incorporated attachment
measures of attachment and family satisfaction as variables, and those that have are generally
found in the romantic relationship satisfaction literature. For example, Noftle and Shaver (2006)
found that both attachment anxiety and levels of avoidance were negatively correlated with
relationship quality. The current study will aim to address the unfilled void in the literature on
family satisfaction and build on the sparse studies of family satisfaction already published by
exploring interpersonal and individual (i.e., contextual and personal) variables related to family
satisfaction for emerging adults. In addition, multiple measures of family satisfaction will be
utilized to get a sense of which specific areas of family life are emerging adults most satisfied
with and which aspects of personality and/or familial interaction are most strongly related to family satisfaction, and in what ways. The sections below will describe the contextual (interpersonal/interactional) and individual (personal) theoretical bases for the current study; respectively represented by family systems and attachment theories.

**Family Systems Theory: Highlighting the Importance of Interpersonal Interaction Patterns**

Considering the broad theoretical framework presented in Chapter 1, one of the most important microsystems in the developmental ecology across the lifespan is the family system (Bronfenbrenner, 1989). In particular, interpersonal family relationships during late adolescence and emerging adulthood have been found to be important in the developmental trajectory of the individual. For example, Bell and Bell (2005) reported that family experiences of 15 to 17 year old adolescents predicted the well-being of those adolescents 25 years later, as middle-aged adults. In addition, relationship issues (categorically), including family and other relationships, is consistently one of the top two issues faced by college students; more than 50% of students receiving counseling services were experiencing relationship problems (Benton, Robertson, Tseng, Newton, & Benton, 2003). Interpersonal problems was also the most frequently reported presenting problem for a sample of clients seeking services in a community mental health center almost three decades ago (Silverman, 1980), suggesting the stable salience of interpersonal relationships to mental health and well-being.

In regards to the mental health and developmental trajectories of emerging adults, research has demonstrated that not only are there specific parental behaviors that are characteristic of the adolescents’ transition to adulthood, such as an acknowledgement implying the child has reached adulthood (Aquilino, 2006), but emerging adults perceptions of patterns of parental behavior may also have an impact. Thus, not only do specific behaviors of other family members impact an individual within the family, but that individual’s perceptions of those
behaviors also play a role. As such, it is important to retain a systemic view of the potential impact of family interactional patterns on individual family members, but also simultaneously allow for the impact of individual perceptions (i.e., internal mental operations) that may impact the individual and the relationship context.

Several well-known models of family functioning have been developed in the family systems literature that have been used to examine normative processes in families as well as derivations in family processes that lead to problematic family functioning. In particular, the Circumplex Model (Olson, Candyce, & Sprenkle, 1980), the McMaster Model (Westley & Epstein, 1969), and the Beavers System Model (Beavers & Hampson, 1990) all include aspects of emotional connectedness and communication as hallmarks of family functioning. Although each model includes other aspects as well, communication and emotional connectedness are common to all three models, as well as other literature that discusses family functioning (e.g., Steinberg, 2001)

**Emotional Bonds: The Glue of Family Systems**

Research has revealed numerous links between emotional bonds and other indicators of relationship health between parents and children, including individual and family functioning. For example, Barber and Olsen (1997) explored relationships between measures of adolescent functioning (i.e., school grades, feelings of depression, & antisocial behavior) and dimensions of socialization (i.e., connectedness, regulation, & autonomy) across socialization contexts and concluded that family was the most important socialization context for the youth in their sample. Specifically, connection, regulation, and autonomy were correlated positively in family socialization experiences. These findings are in line with theoretical and empirical work that suggests that achieving a balance of intimacy and autonomy leads to the most positive and
functional relationship contexts and developmental outcomes (e.g., Cohen, Vasey, & Gravazzi, 2003; Mattanah, 2001).

Other research utilizing in-depth interviews between researchers and parents revealed emotional closeness and support were important aspects of relations between parents and children across time, from when the children were young, to early adolescents, to young adults (Aquilino, 1997). Analyses resulting from this interview data also suggest that emotional closeness, support, and conflict at an earlier age was predictive of emotional closeness, shared activities, support from child to parent, and levels of control-conflict when the children were young adults. Although this research uses in-depth data obtained from interviews with a large national sample, the biggest drawback is that the data analyzed was only that from parents’ perspectives. Despite this limitation, the author concludes that, while old patterns of interaction do hold some predictive and solidarity value, these patterns may change when families enter or transition to a new stage in life. Furthermore, drawing on Elder (1984), the author interprets the results to be consistent with a life course framework with suggests that change in the individual life paths of family members precipitates relationship change (Aquilino, 1997).

Taking a step to improve upon the limitations of the previous published results, Aquilino (1999) published results of his analysis of both parents and young adults’ responses to the same interview questions (parents only were interviewed when the children were younger). His main goals were to explore whether or not there were patterns of differences reported between parents and their young adult children regarding their relationships, and which factors would predict whether there was high agreement among parents and young adults or low. It may be particularly relevant to the current study that Aquilino found parents reported a more positive view of intergenerational relationships than did young adult children, especially for warmth-
closeness. Again, this is in line with prior empirical research that, through factor analysis of parent-child relationship inventories, consistently finds two main dimensions: warmth-support and control (e.g., Amato, 1990; Barnes & Farrell, 1992) and shows that emerging adults rate these dimensions to be lower in their families than do parents (e.g., Nollar & Callan, 1986; Steinberg, 2001). Furthermore, it appears that the discrepancy between parents and children on ratings of these dimensions decreases from middle adolescence to emerging adulthood (Nollar & Callan, 1986). The interactional perspective in family systems suggests that the interactions (i.e., communication patterns) between parents and emerging adults represent and communicate these dimensions of warmth-support and control in these intergenerational relationships. It has been repeatedly suggested that transitions in the developmental path of families may highlight patterns, strengths and weaknesses of familial bonds, and areas of flexibility (or lack thereof) in families (e.g., Olson & Gorall, 2003; Scabini, Marta, & Lanz, 2006) Furthermore, leaving home has been posited to be “the transition [in young adulthood] that has the greatest power to shake up earlier styles of relating” (Aquilino, p. 682), which makes college students ripe for examination of patterns of relating and prime representatives of the emerging adult cohort.

Additional studies have provided further insight into the role of emotional closeness in relationships between emerging adults and parents. For example, Lefkowitz (2005) examined responses from college students regarding their perceived changes in three main areas of their lives: relationship with parents, religiosity, and views on sex. The results suggested not only that changes in relationships with parents was the most commonly indicated change (with less than 20% of the sample reporting “no change” with parents), but it was the quality of the relationship that was reported to change rather than changes in amount or type of contact. Although more emerging adults reported that the quality of the relationship with their parents improved (i.e., feel
closer to their parents since starting college), a fair number reported that the relationship quality had decreased. In addition, respondents reported changes in communication patterns (i.e., more open or less open communication) since beginning college. Overall, and in concurrence with other research (e.g., Aquilino, 1997; Rice & Mulkeen, 1995), the changes that emerging adults report appear to be positive change from the respondents perspective. But what accounts for those who do not report those same positive changes or indicate that the changes that have occurred are in the negative direction?

Are there predictable changes in communication patterns representing closeness and control, are the changes driven by individual characteristics (i.e., personality or attachment style), or does the interaction of these variables best explain why some report positive changes while others report otherwise? Lefkowitz (2005) offers some fodder in considering these questions, indicating that those who reported a decrease in contact with parents tended to have started college more recently and those who had been at college longer reported changes more positively than those who had been at college less time. In addition, participants who reported that parents had less decision-making power in their relationship tended to portray changes as more positive, as did those who reported closer relationships with their parents. Despite these results and their apparent inexorable connection to emotional bonds between emerging adults and parents, very little, if any research has examined the role that attachment styles may play in explaining individual differences in relationship changes and positive versus negative views of relationships between parents and emerging adults. Attachment styles in emerging adults will be discussed in a later section of this chapter. For now, an examination of another main aspect of family functioning: communication.
Family Systems and Patterns of Communication

The three models of family functioning described above (i.e., Circumplex, McMaster, & Beavers models) include emotional bonds and communication as crucial aspects of the models. The Circumplex and McMaster models include communication explicitly, each naming one major dimension of family functioning “communication”, while the Beavers models includes communication more implicitly in such subscales as “clarity of expression” and “degree of assertiveness”. Regardless of the centrality of communication, the construct plays a large role in determining overall family functioning. However, each model treats communication in a slightly different way. A comparison of the communication dimensions of the Circumplex model and MMFF highlights some important considerations.

Communication in the Circumplex Model. Drawing directly on work from researchers using an interactional view (i.e., Watzlawick and colleagues, as cited in Barnes & Olson., 1982) when discussing the role of communication in human interactions, according to Barnes and Olson (1982) family dynamics are expected to change over time as children grow from dependent infants to autonomous adults, and communication is essential to this change. Conceptually, communication in families is thought to vary along the dimensions of open family communication and problems in family communication (Barnes & Olson). The open communication dimension is thought to encapsulate “positive” aspects of family communication such as, free flowing exchange of information, lack of constraint, and degree of understanding. The problem communication dimension is thought to encapsulate “negative” aspects of family communication such as, hesitancy to share, negative styles of interaction, and selectivity or caution in what is shared. The authors discuss “positive” and “negative” communication, but fail to articulate the consideration that levels of openness and constraint or styles of interaction may
be considered positive or negative, functional or dysfunctional depending on within or between group differences in families.

**Communication in the McMaster model.** Communication in the MMFF is defined as “the exchange of verbal information within a family” (Epstein, Ryan, Bishop, Miller, & Keitner, 2003). According to the model, communication can be subdivided into instrumental and affective areas. Instrumental issues are basic in nature, such as provision of money, food, transportation, etc., while affective issues are those of emotion or feeling. In addition, the authors suggest that two other aspects of family communication patterns can be assessed: clear vs. masked communication and direct vs. indirect communication (Epstein et al.). Clear vs. masked communication refers to the degree to which the content of messages is clearly stated, with the opposite pole of this dimension reflecting muddied or vague messages. Direct vs. indirect communication refers to the degree to which family members talk to the appropriate individuals as opposed to deflecting messages to (or through) other people.

However, the study of communication patterns in families is not limited to these formalized models of family functioning. Indeed, patterns of communication between family members has been studied for quite some time and has led to important conclusions in regards to individual and family functioning. Again however, as with the other main constructs in the current study, very little of this research has focused specifically on the relationship between emerging adults and their parents. Despite this limitation, research has yielded some interesting insights into the ways in which communication patterns in relationships relate to individual and interpersonal well-being.

Much of the research on communication patterns originates from work with dysfunctional families. For example, Prinz, Forster, Kent, and O’Leary (1979) found that an
analysis of patterns of conflict among mother-adolescent dyads was extremely successful in classifying dyads that were grouped into a distressed clinical sample and a nondistressed normative sample. In addition, they determined that it was the intensity of the conflict that discriminated the two groups, rather than the number of issues discussed or the number of issues in which there was disagreement. They further concluded that much of the discrimination came from measures that were concerned with the way the two family members talked to each other. The distressed clinical families displayed communication styles that were laden with counterproductive negative affect. Thus, it was the communication behaviors related to conflict situations, rather than the mere occurrence of conflict or particular decision-making roles that was most predictive of family functioning. Although numerous studies have examined communication/interactional patterns in clinical versus nonclinical families, research has also examined parent-adolescent/young adult communication patterns in “normal” families.

Barnes and Olson (1985) examined parent-adolescent communication in a sample of normal families and report generational differences in the perception of communication in the family. Adolescents (mean age of 19 years) reported lower scores on measures of parent-adolescent communication (i.e., less openness and more problems in communication) than did either mothers or fathers. In addition, the pattern of communication in the family as perceived by the adolescent did not perfectly follow the predictions of the Circumplex model, which predicted that balanced families would report higher scores on communication whereas extreme families would report lower scores. The authors conclude that perhaps because the sample consisted of only “normal” families, the extreme types of families that the Circumplex model is designed to capture were not represented leading to greater sensitivity to variation in the balanced family types represented in the sample. An alternative explanation, however, could be
that individual differences account for variations in preferred levels of communication so that, even in balanced families, individuals may perceive different levels of communication to be differentially functional. A premise in the current paper is that working models of attachment relationships may form the foundation of such individual differences. Such a premise requires solid theoretical grounding in differential predictions attributable to attachment styles and underlying working models of attachment.

**Attachment**

Attachment Theory provides a theoretical foundation to explain personality development based, in part, on interactions between a mother and her infant (Salter Ainsworth & Bowlby, 1991). These interactions are thought to serve an ethological purpose and provide feedback about the levels of security and responsiveness in the infant-mother relationship (Bowlby, 1969, 1973, 1982, 1988). Over time, this information becomes internalized in the individual and represented as cognitive models of important relationships. There has also been some deliberation in the literature as to the structure, degree of continuity, and importance of attachment as one grows out of infancy and into adulthood. Despite this discussion, we can look to empirical research to confirm that attachment is relevant “from the cradle to the grave” (Bowlby, 1979, p. 129). This section will provide a brief overview of attachment and review findings and literature relevant to the current study.

**Attachment Theory and Early Empirical Work**

Perhaps the most impressive empirical literature has developed from the use of Ainsworth’s Strange Situation (Ainsworth, Blehar, Waters, & Wall, 1978), which studied attachment by directly observing the behavior of infants/young children and their mothers. The particular behaviors that were observed focused on the child’s exploratory behaviors when the mother was present, the child’s behaviors when the mother departed and when a stranger was
present, and the child’s and mother’s behaviors upon her return. These behaviors were thought to allow for direct observation of the attachment behavioral system, which became activated when there was an apparent threat to the felt security in the child-mother relationship, and upon mother’s return in efforts to ensure the continued proximity to her. These early observational studies were conducted across cultures (Salter Ainsworth, 1967; Salter Ainsworth & Bell, 1970) and helped to clarify the basic foundations of Bowlby’s theoretical writings.

**Attachment theory: Basic foundations**

**Separation/perceived threat.** An ethological-evoluationary perspective views attachment behaviors as functional in ensuring the survival of the species. Thus, it is crucial that there be some mechanism to ensure that defenseless infants maintain a certain level of protection. Perhaps the first step in developing attachment is an ability to discriminate between ‘mother’ (or primary caretaker) and others (Salter Ainsworth, 1967). Once this discrimination has been made, differential responses (e.g., crying, smiling, and vocalizations) emerge in interactions with mother and others. The differential crying response, for example, is seen most readily in infants when an attachment figure leaves the proximity of the infant. Regardless of the behavioral manifestations, the attachment system is thought to become activated during times of separation or perceived threat.

**Felt security.** The main function of the attachment system throughout the lifespan can be extrapolated from Bowlby’s (1969, 1973, 1988) thorough discussions of his theory and Ainsworth’s (1967, 1970) empirical evidence. Thus, establishing a sense of “felt security” ( ) for the individual appears to be the main goal of the attachment system. This sense of security is realized in two main ways by the individual based on interaction with the attachment figure. If the individual finds evidence that the attachment figure can provide both a secure base from which to explore and a safe haven which he/she can turn in times of distress, felt security should
be achieved. These theorized goals of attachment have been observed in both humans (Salter Ainsworth, 1967) and primates (Harlow, 1961).

**A secure base.** An individual, once mobile, has an innate tendency to explore the world. As the individual continues to develop and mature, even into adulthood, this tendency to explore one’s surroundings remains. Observations from comparative psychology (Hinde et al., 1964, 1967, as cited in Bowlby, 1969) as well as human attachment research (e.g., Salter Ainsworth, 1967) indicate that the infant will begin to explore surroundings, when the attachment figure is in close proximity, but the exploration is much less expansive if the attachment figure is not perceived to be present. In addition, even during explorations, the infant will alternate between exploration and clinging to/hovering close to the attachment figure. Thus, if a secure attachment bond exists at any given time, the attachment figure, when present, is considered to be a secure base from which to engage in autonomous exploration. In addition, any subsequent interactions with the attachment figure can serve to provide further evidence that that figure can serve as a secure base, thereby strengthening the attachment bond, or provide contradictory evidence - that the attachment figure can not be counted on to serve as a secure base, thereby requiring re-evaluation to the attachment bond.

**Safe haven.** In times of perceived threat, separation, or distress, the attachment system will be activated to return the individual to a proximal space in relation to the attachment figure. This proximity is theorized to function so that the more capable attachment figure can assist the individual in dealing with the intense emotions (i.e., fear) that may accompany the separation or distress (Bowlby, 1973). Again, the resulting interaction with the attachment figure may serve to strengthen the attachment bond or suggest re-assessment. As Bowlby (1969) notes, once the attachment system has been activated, responses by the attachment figure help to further shape
the attachment bond, with certain responses being reinforced by the individual, thus serving to shape the attachment behaviors of the attachment figure. Thus, a reciprocal, mutually influential, relationship between the attachment behavior of the individual and attachment figure is posited.

**Attachment styles**

Based on the pattern of behavioral interaction (the presence of more advanced verbal interactions is not yet seen in an infant), Ainsworth and a host of other researchers identified three main categories to describe the attachment relationship. Although the characteristics of infants in each category have been reported in the literature numerous times, the following descriptions will be based on Waters 1978 publication regarding individual differences in infant-mother attachment. Securely attached infants demonstrate high levels of proximity seeking and contact maintaining behaviors, along with low levels of proximity avoiding and contact resisting behaviors. Infants who are rated to have an insecure-avoidant attachment demonstrate low levels of proximity seeking, contact maintaining behaviors and contact resisting behaviors, as well as high levels of proximity avoiding behaviors. Insecure-ambivalent infants demonstrate high levels of proximity seeking, contact maintaining, and contact resisting behaviors, as well as low levels of proximity avoiding behaviors (Waters, 1978).

In sum, the basic foundations of attachment theory suggest that the aim of the attachment system and its behavior is to keep the attachment figure close (i.e., maintain proximity) in order to maintain a sense of felt security allowing for autonomous exploration of the environment and emotional regulation in times of distress (Bowlby, 1969). Based upon interactions between an infant and attachment figure, three primary attachment styles were initially identified, one depicting a secure attachment relationship, the other two depicting differing aspects of insecure attachment relationships.
The mechanisms by which attachment bonds develop and are maintained remains an important issue to proponents of attachment theory. For infants, the main behavioral mechanism aimed at returning a sense of security is a communicative one (e.g., crying). However, as the child develops the capacity for language and other, more advanced, cognitive processes, the pattern of behavioral mechanisms of attachment become internalized as cognitive constructs. Thus, theoretical and empirical explorations of attachment relationships as an individual matures describe internal representational models of attachment relationships (e.g., Collins & Read, 1990; Hazan & Shaver, 1994) and the communicative mechanisms characteristic of attachment-related interactions naturally should become more complex and abstract as well.

In describing attachment relationships, Bowlby (1988) suggests that there are three types of attachment relationships, those with a sexual partner, those with parents, and those with offspring; each of these types of relationships contribute to a person’s whole emotional life such that when these relationships are running smoothly, a person is content. When not running smoothly, these relationships can contribute to varying types of emotional discontent. It becomes clear that as children develop, they begin to show more, and more advanced, attachment-related behaviors and operate on internal representational models of relationships with important others. These representational models will be described below, however, research indicating how these representational models relate to emerging adults’ contentedness (i.e., satisfaction) within their families of origin is lacking.

Working Models of Relationships

Main, Kaplan, and Cassidy (1985) define internal working model of attachment as, “a set of conscious and/or unconscious rules for the organization of information relevant to attachment and for obtaining or limiting access to that information, that is, to information regarding attachment-related experiences, feelings, and ideations” (pp. 66-67). They suggest that their
attention to mental representations of the self in relation to attachment shifts the focus from observable behaviors reminiscent of Ainsworth’s Strange Situation (1967) to representation and language. Internal working models become influential once a child develops the appropriate level of cognition, and are analogous to cognitive schemas for how an individual views him/herself in relation to significant others in his/her life. These internal working models have been said to direct not only feelings and behavior but also attention, memory, and cognition; furthermore these models will reflect individual differences in patterns of nonverbal behavior as well as patterns of language (Main, Kaplan, & Cassidy, 1985). As such, internal working models might be thought of as the basis for beliefs, expectations, and perceived needs in the context of important relationships that contain strong emotional components.

**Measuring working models of attachment**

Although attachment was initially examined by directly observing the behavioral interactions of infants and primary caregivers (usually mothers), the internal working models of attachment construct has expanded the ways in which attachment can be observed/measured. For example, the Adult Attachment Interview is an in-depth interview based upon components and important findings from Ainsworth Strange Situation (Salter Ainsworth, 1967) and measures the attachment styles of adults based on the consistency and coherence by which they can discuss attachment relationships during their childhood (Main, Kaplan, & Cassidy, 1985). In addition, numerous self-report measures have been developed in efforts to measure attachment styles at various points in the lifespan and in reference to various important relationships including parents, peers, and spouses. These methods of measuring attachment have taken divergent roads and the result is two different methods of conceptualizing and measuring attachment style. First, individuals can be grouped into three (or four) discrete categories representing characteristically different working models of self and other. This can be done by
having participants read a series of three (or four) paragraphs and indicating how much each paragraph describes him/herself or by having participants indicate which one paragraph best represents them (e.g., Bartholomew & Horowitz, 1991). Alternatively, multi-item measures have been developed which score participants along a continuum of two theoretical dimensions of attachment. These measures will ask participants to answer a series of questions which will result in self-report ratings of avoidance and anxiety (Bartholomew & Horowitz, 1991) (variously termed “closeness” and “anxiety”). Research utilizing these operationalized measures of attachment has revealed important associations with attachment styles.

For example, utilizing a group of undergraduate students, Bartholomew and Horowitz (1991) found significant differences between attachment style groups on levels of interpersonal problems (Bartholomew & Horowitz, 1991). Specifically, individuals who scored high on dependence (working model of self, preoccupied and fearful attachment styles) reported greater numbers of interpersonal problems than those who scored low on this dimension. The authors concluded that each style is associated with a distinct pattern of interpersonal problems and, although the model was developed out of research regarding adult attachment to romantic partners, the four category model is applicable to representations of family relations.

**Working models of attachment and family relationships**

Over the past two decades, there has been an expansion in the attachment literature to consider a myriad of external forces, beyond the dyad of child-primary caregiver (most often the mother) (Belsky, 1999), including the family as a system of influence (e.g., Cowan, 1997; Rothbaum, Rosen, Ujile, & Uchida, 2002). If we accept that the construct of attachment, particularly working models of self and others, is applicable to representations of family relationships (Bartholomew & Horowitz, 1991), then we should find success in finding relationships between working models of attachment and various aspects of family functioning.
and family outcomes. Further, we should find relations with family members outside of the mother-child dyad relating to attachment behaviors and representations.

Various researchers, for example, have found links between the father-child relationship and attachment style. Main and Weston (1981) found that toddler’s demonstrate unique attachment relationships to mother and father (i.e., these relationships are independent) and that the relationship with father does have an impact on the child’s behavior. Pincus and colleagues (1999) found that adults who fell into different attachment style categories reported different recollections of their relationship with their fathers based upon the attachment category into which they fell. Gallo, Smith, and Ruiz (2003) reported that adults’ recollections of their relationships with their fathers were related to current level of attachment security, although different aspects of relationship with father impacted attachment differently for males versus females.

Highlighted in Bowlby’s (1988) discussion of thoughts and feelings that become ‘shut off’ from conscious experience, are occasions in which a child is repeatedly rejected by the parents are in which his/her desires for care, love, and comforting are met with contempt of indifference. It is reasonable to imagine that daily patterns of communication, such as those in which open communication is lacking and children are not involved in the decision-making processes, are interpreted by the child as an indication of rejection or indifference. In describing the formation and function of attachment relationships, Bowlby (1988), on more than one occasion, implies that subtle events can have as much, if not greater, impact than explicit events in the attachment relationship. Again, this suggests that regular patterns of communication may communicate important information about the attachment relationship.
While a host of research studies have examined the relationship between various aspects of family communication and adolescents’ development in areas such as ego development, self-regard, role-taking, and various adolescent behaviors (see Grotevant & Cooper, 1983) for a review; and although numerous authors have made allusions or analogies to the impact of attachment styles on such relationships (e.g., Cooper, Grotevant, & Condon, 1983; Steinberg, 2001) few, if any, studies have directly examined the link between attachment styles (i.e., working models of relationships) and family communication patterns from the perspective of emerging adults. A recent work by Erdman and Caffery (2003) explicitly merges attachment with a family systems perspective, although they take a decidedly clinical perspective and thus could benefit from empirical work to contribute to the richness of the theoretical merging. This research aims to contribute an exploratory, empirical investigation into the relationship between attachment style and family communication patterns as they relate to levels of family satisfaction in emerging adults.

**Attachment and Emerging Adults**

Although generally not explicitly conceptualized as emerging adulthood (rather late adolescence or adolescence), various researchers have investigated the role of attachment for young adult college students. Leaving home for college is considered a normal developmental process during which emotional and instrumental autonomy, and a reduction in dependence on parents, are relevant tasks (Kenny, 1987). Although peers can increasingly become important sources of influence and support, when students experience problems in adjusting to college beyond the initial transition period, family ties are often implicated as the reason for such difficulty (e.g., Haley, 1980; Kraemer, 1982). Thus, a thorough examination of the components and mechanisms involved in maintaining family ties is warranted. Research examining family relationships during the transition-to-college years (a typical developmental transition of
emerging adults) has yielded interesting, although sometimes conflicting, results and raises questions for further research.

**Relationships with parents.** One of the consistent and, in the face of previous conceptualizations about late adolescent periods, surprising findings to come out of research with emerging adults is the finding that emerging adults who are transitioning to college and out of the home report a high degree of affective closeness with their parents (e.g., Scabini, Marta, & Lanz, 2006). In addition, during the first year of college, many students report continuing to turn to their parents as a source of help and support (Kenny, 1987). Numerous possible explanations for these findings have be posited, and although not a direct reflection of attachment bonds, per se, these findings do suggest that emotional ties to parents are important in the lives of emerging adults who are transitioning to college. In interviews with 1st-year college students, many of the students revealed that the knowledge [or perception] that parents are confident, accepting, and available as a source of support, if needed, is more important than the actual frequency of contact with parents (Kenny, 1985).

Further evidence of the importance of the attachment bonds comes directly from studies that have included attachment as an independent variable. For example, Kenny and Donaldson (1990) conclude that parental attachment, particularly secure attachment to parents, is associated with adaptive functioning in college students. Consistent with this finding, Rice, FitzGerald, Whaley, and Gibbs (1995) conducted cross-sectional and longitudinal studies examining attachment, separation-individuation, and college student adjustment when students were freshman and juniors and report that the developmental function of attachment seems to be the same for both freshman and upperclassmen. Additional findings from the Rice et al. studies indicate that upperclassmen were better adjusted and more independent than freshman, that
securely attached students demonstrated an strong advantage in managing the developmental and adjustment challenges of the college environment (with some effect sizes reported to larger than a standard deviation), and that current conditions of adolescent-parent relationships are more likely to affect adolescents’ feelings of anger, resentment, and hostility toward parents. Lopez and Hsu (2002) further confirmed the relationship of secure parental attachment to increased adjustment to leaving home for college and extended attachment research by demonstrating an association between secure attachment and family satisfaction. The Lopez and Hsu study is one of the first to report the link between secure attachment to parents and family satisfaction in a sample of emerging adults, although this was not the focus of their study, so further elaboration was withheld.

Because behavioral mechanisms of the attachment system are activated in times of danger, stress, and novelty, and has the outcome of gaining and maintaining proximity and contact with an attachment figure (Crowell, Fraley, & Shaver, 1999), the transition away from home to college is one that is expected to see the individual faced with novelty, stress, and perhaps perceived danger or threat. In addition, because actual proximity to the parental attachment figure is often not a realistic or consistent outcome, mechanisms that achieve contact, such as verbal interactions (i.e., distance communication) may become even more important mechanisms to the attachment system. Thus, examining family-level functions, such as family communication patterns, may play an important role in understanding the development, impact, and interpersonal mechanisms of working models of attachment at various points in the individual, and familial, developmental lifespan.

**Putting It Together: Attachment, Communication, and Relationship Satisfaction**

Despite the dearth of literature on relationships between such variables in emerging adults’ relationships with parents, suggested direction for explorations in this area can be found
in the literature on marital satisfaction and functioning. Researchers have utilized conceptualizations of attachment based on adult working models of relationships that are theorized to develop from childhood attachment bonds with primary caretaker(s) to examine marital or romantic relationships (Kirkpatrick & Hazan, 1994; Kobak & Hazan, 1991). Thus, combined with research on younger children in families, this body of work can provide markers for aspects of relationships that are related to attachment categories or dimensions and offer starting points for examining communication patterns and family functioning in families with emerging adults. A thorough review of the literature on marital satisfaction, attachment, and communication is beyond the scope of this paper, however, I will review some of the main works and findings that relate to the current proposed study.

Hazan and Shaver (1987) introduced groundbreaking research that examined romantic love as an attachment process. They suggested that the attachment process in romantic love is experienced differently by those with different attachment histories. In fact, implicit in their writing is the idea that working models of romantic relationships are influenced directly by the individuals’ social histories with caretakers (i.e., mothers or parents). Based on these assertions, they conducted a series of studies and published a number of important conclusions. They were able to describe the differences between the ways in which individuals endorsing a secure attachment style described their relationships with their parents (i.e., affectionate, caring, respectful, non-intrusive, non-demanding) versus the ways in which insecure individuals described their parents (i.e., mother was cold and rejecting – avoidant subjects; father was unfair – anxious/ambivalent subjects). Also, younger adults (under 26 years of age) and college students (mean age of 18 years) who endorsed an avoidant attachment style described their relationships in more favorable terms than older avoidant individuals, which was interpreted as a
function of the defensive nature of an avoidant attachment style such that younger avoidant individuals idealize their relationships with their parents in order to avoid the negative feelings associated with those relationships. Finally, individuals endorsing different attachment styles reported reliable differences in the ways in which they experienced romantic relationships and the expectations they held about relationships.

Collins & Read (1990) examined the relationships between adult attachment style dimensions, attachment history (with parents), and aspects of current romantic relationships in a series of three empirical questionnaire studies. They offered a number of conclusions, some of which are pertinent to the current discussion. First, there was moderate evidence that the descriptions of the opposite sex parent predicted the attachment style of their partner. Second, both partners’ attachment style and one’s own attachment style predicted levels of satisfaction with the relationship, including communication in the relationship. Finally, one’s perceptions of his/her partner’s actions were predictive of satisfaction with the relationship, although there were sex differences in this area with males’ satisfaction being strongly associated with his female partners’ relationship anxiety, while females’ satisfaction was most strongly associated with her partners’ comfort with closeness. This work by Collins and Read provides some insight into the relationship between adult attachment style and aspects of relationship satisfaction in young adults (mean age in their study was 18.8) but is limited in a number of ways. First, the relationship of focus was a romantic relationship, not the relationship with one’s parent(s). Second, although communication was included as a dimension of relationship satisfaction, they did not investigate the possible interaction between attachment style and communication patterns in important relationships. Finally, attachment style was operationalized using Hazan &

Feeney, Nollar, & Callan (1994) examined attachment style, two specific aspects of communication (i.e., conflict patterns and accuracy of message decoding), and marital satisfaction in early years of marriage. They report that for males, comfort with closeness was positively related to marital satisfaction \((r = .40)\) and attachment anxiety was negatively related to marital satisfaction \((r = -.64)\); while for females, only attachment anxiety was associated with marital satisfaction \((r = -.47)\). Communication patterns were related to relationship satisfaction for both husbands and wives regardless of how these were measured or which aspects were being measured \((r’s = .31 - .57)\). In addition, both attachment and communication were in some ways predictive of later relationship satisfaction, although the overall patterns of relationships between variables were different for men compared to women. The authors conclude by suggesting that their results “underlie the relevance of attachment theory for understanding communication and satisfaction in established relationships” (p. 304).

Feeney (1994) further examined attachment style, communication patterns, and satisfaction across the life cycle of the marriage in a sample of 361 married couples. In that sample, security of attachment was associated with one’s own relationship satisfaction, with secure individuals reporting higher levels of satisfaction. Additionally, they found that the association between attachment dimensions and relationship satisfaction was mediated by communication patterns for wives, and only partially so for husbands. In light of other research by Feeney, Nollar, and Callan (1994), these results suggest that attachment and communication both have independent affects on relationship satisfaction, but also demonstrate some additional qualities, in this case, mediation of attachment on satisfaction by communication. However, this
research utilized measures of communication that were specific to communication during conflict, however, and may have neglected other important aspects of communication in close relationships.

One additional study that directly explore the relationship between attachment, communication patterns, and relationship satisfaction is worthy of note. Marcus (1997) explored the relationships between attachment dimensions (i.e., dependency, closeness, and anxiety), communication patterns (i.e., frequency and expressiveness), and relationship satisfaction in relation to one important adult romantic relationship. Marcus found associations between attachment and relationship satisfaction, between attachment and communication, and between communication and relationship satisfaction. She also tested a moderator hypothesis that attachment would moderate the relationship between communication and relationship satisfaction. No support was found for the moderator hypothesis due to the strength of the association between communication and relationship satisfaction. Perhaps the lack of a moderating effect was due to aspects specific to marital relationships. Extending this type of study to the relationships between emerging adults and parents appears warranted and possibly fruitful.

Overall, the literature regarding marital satisfaction, communication, and attachment suggest that these three variables can be successfully included in models examining the relationships among them. Both attachment style (i.e., secure or insecure) and dimensions of attachment working models (i.e., anxiety and avoidance) have been found to be consistently related to relationship satisfaction. Specific aspects of communication that appear to be related to marital satisfaction include expression of positive and negative emotions, conflict resolution patterns, and accuracy in the decoding of messages.
Assumptions of the Current Research and Support for Those Assumptions

The following research questions and hypotheses rest upon a number of important assumptions about the constructs utilized in this study and the potential relationships among them. The first assumption is that family satisfaction can be conceptualized as the degree to which one’s expectations about family relationships are perceived to be met. In other words, if the expectations that one has about how their family should operate are perceived to be met by the individual, this would be reflected in higher levels of family satisfaction. In contrast, if the expectations that one has about how the family should operate are perceived to be unmet, this would be reflected in lower levels of family satisfaction. Literature support for this assumption can be found in research focused on relational standards and expectations. Kelley and Burgoon (1991) examined husbands and wives relational expectations in the context of their marriage and found that when those expectations were met or exceeded, higher marital satisfaction resulted; however, when those expectations were violated or went unmet, lower marital satisfaction resulted.

Caughlin (2003) reported a series of studies aimed at examining family communication standards and tested three separate models designed to explain the relationship between communication standards and relational satisfaction. His findings provided the strongest support for the unmet expectations model which suggests that if expectations regarding family communication are not met, the result is lower levels of family satisfaction. Finally, he reported that certain family communication standards moderated the relationship between individuals’ perceptions of family communication behaviors and individuals’ level of family satisfaction. These findings, as well as those from the Kelley and Burgoon (1991) study offer support for the assumption that family satisfaction is a reflection of the degree to which relationship expectations are perceived to be met. In addition, Caughlin (2003) offers support for the
hypothesis regarding the moderating effect of attachment on the relationship between communication and satisfaction presented below.

A second assumption driving the current study is that individuals with different attachment styles will implicitly have different expectations, beliefs, or needs in regards to close relationships. Loose support for this assumption may be found in the work of Sillars, Pike, Jones, and Redmon (1983) who found that the relationship between marital conflict and marital satisfaction depends on the couple’s marital type. In other words, couples who had different global characteristics (according to Fitzpatrick’s marital types, e.g., Fitzpatrick & Best, 1979) perceived conflict in the relationship differently, particularly as it related to their level of relational satisfaction. In the context of the first assumption detailed above, this may be interpreted as an indication that different couple types have different expectations regarding conflict in their marriages. As couple type represents characteristics (i.e., different levels of connectedness and autonomy) at the relationship level (Fitzpatrick & Best, 1979), attachment similarly represents characteristics (i.e., different levels of avoidance and anxiety) at the individual level (Ainsworth, 1989).

The final assumption underlying the current research is that attachment, perception of communication between family members, and subjective levels of family satisfaction represent related, but distinct constructs. Although this assumption will be put to the test by examining correlations and possible multicollinearity once data is collected, a host of previous research studies have provided evidence to support this assumption.

**Research Questions and Hypotheses**

There is abundant support for the continued investigation of attachment in the context of family systems. Previous research suggests that there are reliable relationships between attachment and certain family-level characteristics such as family satisfaction. Various adult
samples have found associations between attachment dimensions or attachment styles and relationship quality or marital satisfaction. Recent literature suggests that dynamic nature of attachment representations and aspects of one’s environment as potential sources and predictors of change. Davila and Cobb (2004) suggest that late adolescence and early adulthood (i.e., emerging adulthood) is a developmental period that seems particularly likely to see changes in attachment security. Thus, there is a strong need to include examinations of correlates of attachment in emerging adulthood and there are calls in the literature for further research into the potential mechanisms for change in security in attachment relationships. The current study will serve as an initial exploration into the ways in which attachment and communication patterns may separately, and jointly, predict levels of family satisfaction in emerging adults.

The current study will be based on strong theoretical bases including Bronfenbrenner’s bioecological perspective, Bowlby’s attachment theory, and family systems thinking. After reviewing the literature, the following research questions come to light:

Research question 1: What are the relationships among scores on dimensions of working models of attachment (i.e., anxiety & avoidance), patterns of family communication, and levels of family satisfaction?

Research question 2: Are there significant differences in levels of family satisfaction between individuals with different attachment styles?

Research question 3: Are there significant patterns of interaction between attachment, family communication, and levels of family satisfaction?

Research question 4: Which aspects of family communication patterns (i.e., openness, problem communication, direct vs. indirect, clear vs. masked, conformity orientation) are most strongly associated with levels of family satisfaction for emerging adults?
Research question 5: After controlling for attachment anxiety or avoidance at time 1, do time 1 communication variables and communication X attachment interaction terms account for significant variance in attachment anxiety or avoidance at time 2? If so, does the inclusion of time 1 family satisfaction increase the predictive power of the model?

Research question 6: Do changes in attachment anxiety or avoidance and changes in patterns of family communication predict levels of family satisfaction across time?

Utilizing the research literature as a foundation, the following specific hypotheses have been developed and are aimed at providing insight into the stated research questions:

Hypothesis 1: Attachment anxiety and avoidance will predict concurrent levels of family satisfaction. More specifically, higher levels of anxiety and higher levels of avoidance will be associated with lower levels of family satisfaction.

There will be a negative relationship between emerging adults’ self-reported ratings of attachment anxiety in relation to their parents and their self-reported levels of family satisfaction. Individuals who are more anxious about the relationship with their parents will report lower levels of family satisfaction during the transition to college.

There will be a negative relationship between emerging adults’ self-reported ratings of attachment avoidance in relation to their parents and their self-reported levels of family satisfaction. Individuals who are more avoidant in relationships with parents will report lower levels of family satisfaction.

Hypothesis 2: Perceived communication patterns will predict concurrent levels of family satisfaction. More specifically, higher levels of openness, conversation orientation, clear communication and direct communication will be associated with higher levels of concurrent
family satisfaction. Higher levels of problem communication will be associated with lower levels of family satisfaction.

Hypothesis 3: Self-reported levels of anxiety and avoidance, as well as perceived patterns in communication, will demonstrate independent effects in predicting levels of family satisfaction.

Hypothesis 4: Attachment anxiety and avoidance will moderate the relationship between perceived communication patterns and level of family satisfaction. The relationship between perceived communication patterns and family satisfaction will be stronger for individuals with higher levels of anxiety than those with lower levels of anxiety or higher levels of avoidance.
CHAPTER 3
METHODS

This chapter will describe a study examining emerging adults’ perceptions of and satisfaction in the relationship with their parents as they experience the developmental transition to college. Although the main interest will be on three sets of focus variables (i.e., attachment representational models, family communication patterns, and family functioning), other potentially relevant variables, such as gender, age, ethnicity, parental marital status, and primary social support person may be included in the final model, based on sample characteristics, to increase the explanatory power of the study’s results.

Participants

Participants for the current study consisted for 233 college students enrolled in an introductory psychology course at a large southeastern university. Eighty-two percent \( (n = 191) \) of the sample was female and 17 percent \( (n = 39) \) was male. The age of participants ranged from 18 to 24 years old, with 36.9 percent \( (n = 86) \) reporting their age to be 18. The remainder of the sample reported the following ages: 19 \( (n = 84; \, 36.2\%) \), 20 \( (n = 40; \, 17.2\%) \), 21 \( (n = 15; \, 6.5\%) \), 22 \( (n = 5; \, 2.1\%) \), 23 and 24 \( (n = 1, \, .4\% \, \text{for both}) \). One participant did not indicate their age. The majority of the sample identified as Caucasian/White \( (n = 134; \, 57.5\%) \), while 15 percent \( (n = 35) \) of the sample identified as African American, 7.7 percent \( (n = 18) \) as Asian American, 12.9 percent \( (n = 30) \) as Hispanic, and 6.9 percent \( (n = 16) \) as Other.

In terms of family status, participants were given the option to choose between the following options: Intact – parents married, Separated/Divorced – parents not remarried, Step family – one or both parents remarried, and Single parent – live with only one parent for reason other than divorce. Almost 68 percent of the current sample \( (n = 153; \, 65.7\%) \) reported that their families are intact. Fifteen percent \( (n = 35) \) reported that their parents are separated/divorced,
while 15.5 percent ($n = 36$) reported one or both parents are remarried and 3.9 percent ($n = 9$) reportedly live with a single parent.

Participants had the option of choosing between the following options to indicate who they perceive to be their primary source of social support: Mother, Father, Brother or Sister, Friend, Boyfriend/Girlfriend, Spouse/Life Partner, or Other. Almost half ($n = 111; 47.6\%$) indicated that their mother is their primary source of social support. Father was the second most frequently indicated source of social support, with 20 percent of the sample ($n = 47$) selecting this option. The remaining frequencies for primary source of social support are as follows: Brother or Sister ($n = 17; 7.3\%$), Friend ($n = 23; 9.9\%$), Boyfriend/Girlfriend ($n = 24; 10.3\%$), Spouse/Life partner ($n = 3; 1.3\%$) and Other ($n = 8; 3.4\%$). Those who indicated “Other” said that their primary source of social support was “myself”, “both parents”, “grandparents”, “God”, “therapist”, and “fraternity brothers”.

**Procedure**

Participants were made aware of the study through the research requirement management system and were then provided a link to the online study. Following the link took participants to the informed consent document. At the bottom of the informed consent document was a link to the survey and instructions that indicated following the link indicates that participants have read and understood the informed consent document and voluntarily agree to participate in the study. The link took participants to one of two (differently ordered) versions of the survey, which includes the measures discussed below. Participants were invited to return to complete the survey again in 6 – 8 weeks. All data was collected utilizing this online survey methodology.
Measures

Parent-Adult Attachment Style Questionnaire (P-AASQ)

Attachment style for emerging adults in relation to their parents will be measured using the Parent-Adult Attachment Style Questionnaire (P-AASQ) developed by Behrens and Lopez (1998). The P-AASQ is designed to assess a respondents’ attachment style in relation to his/her parents. The instrument was adapted from an existing measure of adult attachment style, the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) and presents the respondent with four paragraphs, each reflecting prototypical characteristics of individuals who demonstrate each of 4 attachment styles. Respondents are asked to read the four paragraphs, rate each paragraph on a 7-point Likert scale based on the degree to which the paragraph describes the respondents’ relationship with his/her parent, and put a mark next to the paragraph that best describes the relationship with his/her parent. The respondent is asked to complete the measure twice, once for each parent (father and mother).

Attachment styles are based on a 2 x 2 classification of relative valences (positive vs. negative) of the person’s internalized models of self and other, resulting in these four classifications: secure, preoccupied (representing a positive view of others and a high and low view, respectively, of self), and dismissing and fearful (representing low view of others and a high a low view, respectively, of self). Further the scores across paragraphs can be combined to calculate two continuous variables along the dimensions of attachment anxiety (related to view of self) and attachment avoidance (related to view of other) as described by Griffin and Bartholomew (1994; attachment anxiety = [preoccupied + fearful] – [secure + dismissing]; attachment avoidance = [dismissing + fearful] – [secure + preoccupied]) and recently successfully demonstrated by Sibley and Liu (2006) using the RQ. Sibley and Liu report the dimensions thus calculated to be orthogonal, $r(69) = .02, p = .86$, based on data collected from a
sample of undergraduate psychology students. This procedure has yet to be used with the P-AASQ.

Initial information on the P-AASQ was gathered using two independent samples of college students ($N_1 = 107$, $N_2 = 331$; as reported in Lopez & Hsu, 2002). Based on these samples, the majority of students acknowledged having secure attachment styles with their mothers (range = 69% - 74%) and fathers (range 54% - 61%). A report of further validation of the measure (Lopez & Hsu) found similar frequencies of secure attachment and reported frequencies of preoccupied, dismissive, and fearful styles (2%, 8%, & 6% respectively) styles in relation to mother and somewhat higher frequencies of these styles with father (11%, 18%, & 13% respectively). Test-retest reliability coefficients based on a 1-week interval were reported to be .85 and .79 for attachment styles with father and mother, respectively (Lopez & Hsu).

In studies using the P-AASQ (Behrens & Lopez, 1998; Lopez & Hsu, 2002) participants have been classified into one of three “concordance” groups based on whether their attachment styles with both parents are secure (concordant secure), insecure (concordant insecure), or discordant (secure in relationship with one parent, but not the other); thus, concordance group may represent another way in which to achieve data reduction from the P-AASQ. Concordance group has been reported to be related to a composite index of healthy functioning (Behrens & Lopez, 1998; as cited in Lopez & Hsu, 2002) and levels of anxiety and avoidance in adult romantic relationships and self-splitting (i.e., viewing oneself or others as all good or all bad) (Lopez & Hsu). Other evidence of the construct validity of the P-AASQ is presented by Lopez and Hsu (2002). They report on an earlier study (Behrens & Lopez, 1998) demonstrating the relationship of the P-AASQ in the expected direction to measures of relationship satisfaction,
frequency of contact and discussions with parents, and patterns of healthy and unhealthy functioning.

**Communication**

Communication will be measured using a variety of instruments designed to tap into different aspects of family communication patterns. Bivariate correlations will be examined to see if any of the measures of communication might be highly related and potentially tapping into the same underlying construct. Although the scales have been developed based on different theoretical foundations, some of the subscales aim to measure apparently similar concepts. If high correlations are found, exploratory factor analysis could be run to determine if any of the scales or subscales could be combined to form more reliable indicies of emerging adult-parent communication.

**Parent-adolescent communication scale.**

Two aspects of communication between emerging adults and their parents, from the perspective of the emerging adults, will be measured using the Parent-Adolescent Communication Scale (PAC; Barnes & Olson, 1982). The PAC was designed to measure both positive and negative aspects of communication as well as aspects of the content and process of parent-adolescent interactions. The PAC consists of 20, 5-point Likert-type items which make up two ten-item subscales based on factor analysis. The *Open Family Communication* subscale measures process and content of positive family communication. The focus is on the free flowing exchange of both factual and emotional information, as well as the sense of lack of constraint and degree of understanding and satisfaction experienced in parent-adolescent interactions. Examples of items from this subscale include the following: “If I were in trouble, I could tell my mother/father” and “I openly show affection to my mother/father”. The *Problems in Family Communication* subscale focuses on negative aspects of communication, hesitancy to
share, negative styles of interaction, and selectivity and caution of what is shared. Examples of items from this subscale include the following: “I don’t think I can tell my mother/father how I really feel about some things” and “My mother/father insults me when s/he is angry with me”. The instrument is designed such that adolescents (or in this case, emerging adults) complete the form twice, once in reference to mother and once to father.

Reliability coefficients have consistently been above the commonly accepted .70 level; with alpha reliabilities variously reported as .87 for the Open Communication, .78 for the Problem Communication, and .88 for the Total Communication scales in the original samples using the measure (Barnes & Olson, 1982), to more recent results reporting reliabilities of .94 & .86 for the Open and Problem scales respectively (Berrios-Allison, 2005). Test-retest reliabilities were not found in the literature after extensive review.

**Revised family communication pattern instrument.**

Additional assessment of family communication patterns will be measured using the Revised Family Communication Pattern (RFCP) instrument (Ritchie & Fitzpatrick, 1990). The RFCP is a 26-item measure designed to assess perceptions of intergenerational family communication behavior along two dimensions. The first dimension, Conversation Orientation, represents the degree to which families create a climate in which all family members are encouraged to participate in unrestrained interactions about a wide array of topics (Koerner & Fitzpartick, 2002). The Conversation Orientation subscale is made up of 15 items that are rated on 7-point Likert scales (strongly disagree to strongly agree). Examples of items in this subscale include the following: “In our family we often talk about topics like politics and religion where some persons disagree with others” and “My parents encourage me to express my feelings”. The second dimension, Conformity Orientation, represents the degree to which family communication stresses a climate of homogeneity of attitudes, values, and beliefs (Koerner &
Fitzpatrick). The Conformity Orientation subscale consists of 11 items that are rated on a 7-point Likert scale (strongly disagree to strongly agree). Examples of items in this subscale include the following: “My parents sometimes become irritated with my views if they are different from theirs” and “My parents often say things like “You’ll know better when you grow up.”

Although both dimensions assessed by the RFCP are expected to be related to levels of family satisfaction, due to the theoretical and content similarity of the conversation orientation scale and the open communication scale of the PAC, the current proposal is more centered on the conformity orientation subscale of the RFCP. The importance of autonomy in parent-adolescent relationships has been firmly stated in the research literature, and thus, a measure of communication in emerging adults’ filial relationships that has clear implication for autonomy is of theoretical relevance to the current study. Conformity orientation has been likened to communication associated with autonomy in the parent-child relationship (Koerner & Fitzpatrick, 2002). Indeed, Noller (1995) found conformity orientation to be associated with adolescents’ identity formation, self-esteem, problem-solving, and decision-making. In addition, conformity orientation has been found to be associated with overall structural traditionalism in the family (Fitzpatrick & Ritchie, 1994).

Typically, the RCFP is scored along both dimensions, then, using a median split on each dimension, families are categorized into one of the four basic types. However, due to the exploratory nature of this study, as well as the focus on the conformity orientation subscale of the instrument, the conformity orientation subscale will be scored as a continuous variable and the conversation orientation subscale will only be utilized in post-hoc exploratory analyses.
Reliability data for the RFCP were initially reported by Ritchie and Fitzpatrick (1990). The Conformity Orientation subscale (alpha = .76) and the Conversation Orientation subscale (alpha = .84) both demonstrate acceptable internal consistency and test-retest (between .73 and .93) reliability. Conformity orientation measured using the RCFP has been associated with a focus on oneself during individual speech acts in family conversations (Koerner & Cvancara, as cited in Koerner & Fitzpatrick, 2002), conflict avoidance Koerner & Fitzpatrick, 1997a), more negative behavior in conflicts with romantic partners (Koerner & Fitzpatrick, 1997, as cited in Koerner & Fitzpatrick, 2002), and negatively correlated with depression (Koerner & Fitzpatrick, 1997a), which was interpreted by the authors to reflect the discrepancies between one’s actual self and one’s ideal self.

**Family Satisfaction.**

Family satisfaction will also be measured with more than one instrument. One instrument is designed to measure an individual’s satisfaction with the levels of cohesion and adaptability in the family, while the other is designed to measure the degree to which an adolescent (or emerging adult in this case) is satisfied with the family’s ability to provided a sense of connectedness with simultaneously promoting a sense of autonomy. Again, although these two measures have developed from theoretically different groundings, they are expected to be related and will be examined for the possibility of combining them to form a more reliable, more comprehensive measure of family satisfaction.

**Family satisfaction scale**

The Family Satisfaction Scale (FSS; Olson & Wilson, 1982) was developed based upon the Circumplex Model of family systems (Olson, 1993) and designed to measure satisfaction with two specific aspects of family life, coherence and adaptability. More specifically, there are 8 items that load on the factor of coherence, one for each of the following aspects of coherence
in the Circumplex Model: emotional bonding, boundaries, coalitions, time, space, friends, decision-making, interests and recreation. The 6 items that load on the adaptability dimension are designed to measure the following aspects of adaptability: assertiveness, control, discipline, negotiation style, role relationships and relationship rules. Despite its construct origins, factor analysis results suggest the one factor solution to be the best with all 14 items loading more than .50 on the single factor. All of the items are rated on a 5-point Likert scale (1 = dissatisfied, 5 = extremely satisfied) and the measure is in reference to one’s family as a whole, rather than to dyadic relationships (i.e., mother-adolescent, father-adolescent) within the family. Examples of items on the FSS include the following: “How satisfied are you with how fair the criticism is in your family?” and “How satisfied are you with your freedom to be alone when you want to?”

Although both subscales of the FSS demonstrate reliability coefficients over .83, the total scales score is the most reliable with an alpha coefficient of .92. The authors of the instrument report a five week test-retest Pearson correlation coefficient of .75 (Olson & Wilson, 1982). A more recent study using the FSS (Carprara, Pastorelli, Regalia, Scabini, & Bandura, 2005) reported alpha coefficients of .87 and .85 (two years later). Research utilizing the FSS has found satisfaction as measured by the FSS to be associated in expected directions with perceived filial self-efficacy, openness in communication with parents, levels of parental monitoring, and levels of conflict with parents (Caprara et al., 2005). In addition, family satisfaction, as measured by the FSS has been found to partially account for the relationship between maternal depressive symptoms and adolescents’ substance use (Corona, Lefkowitz, Sigman, & Romo, 2005).

Adolescent family life satisfaction index (AFLSI)

A second measure of family satisfaction will be included in this proposal to tap into the satisfaction of emerging adults’ perceptions of their families’ ability to provide a sense of connectedness while simultaneously encouraging the development of autonomy (Henry,
Ostrander, & Lovelace, 1992). The instrument consists of 13 items measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores indicating higher levels of satisfaction with one’s family. Although a sense of connectedness might be conceptually similar, again, the literature makes it clear that autonomy is an important aspect of family functioning; thus satisfaction with how autonomy is dealt with in one’s family is important in the context of the current study.

The AFLSI consists of two subscales: The Parental Subscale (7 items) and the Sibling Subscale (6 items). Because the current study is most concerned with emerging adults’ relationships with parents, only the Parental Subscale will be used. Again, this subscale is designed to measure the degree to which parents are perceived to provide a sense of connectedness while simultaneously encouraging the development of autonomy (Henry, Ostrander, & Lovelace, 1992). Two of the items were developed previously by researchers who were interested in examining the role of global satisfaction with family life in overall quality of life. The remaining five items were developed by Henry and Lovelace to assess the degree to which respondents are satisfied with the way in which they perceive their parents to provide a sense of connectedness and promote autonomy within the family.

The Parental Subscale is reported to have an internal consistency reliability coefficient of .88 and correlate significantly in the positive direction with the FSS (Henry, Ostrander, & Lovelace, 1992). In addition, although follow-up studies have reported only correlations with the overall index (as opposed to the Parental and Sibling subscales separately) the AFLSI has correlated in the expected directions with family system characteristics such as emotional bonding and flexibility as well as parental behaviors such as support and punitiveness (Henry, 1994).
CHAPTER 4
RESULTS

This chapter presents results of data analyses utilized to test the study’s hypotheses and research questions. First, the treatment of missing data will be discussed, followed by descriptive statistics for the sample, and correlations among relevant demographic, independent and dependent variables. The results of hypothesis testing, including findings related to the relationships between attachment anxiety and avoidance and degree of satisfaction with the family, findings regarding the relationship of different aspects of family communication to family satisfaction, results of the impact on family satisfaction when both attachment and communication variables are considered, and results of testing possible moderator effects suggested by the sample data will be presented. Results of analyses used to examine exploratory research questions related to the longitudinal data collected in this study will conclude the chapter.

Missing Data

There were various types of missing data for the current sample. First, there was a small number of participants who did not rate one of the four attachment paragraphs for either mother or father ($n = 4$) and additional participants ($n = 6$) who did not complete the attachment measure in relation to father. There are no methods for reconciling this type of missing data, so these cases were left as they were and either excluded from the analyses, in the case of the former, or excluded from analyses involving attachment to father, in the case of the latter. There were also cases of missing data in each of the other measures, with any given item having a maximum of four instances of missing data. There did not appear to be any systematic pattern to the data points that were missing, so in each of these cases, the group mean was used to reconcile the missing data point. There were also a few missing data points for the demographic items, but as
with the attachment items there is no way to reconcile this missing data. Cases with missing data were deleted listwise for all analyses.

**Statistical Assumptions**

It is important to check that assumptions are met in order to use multiple regression analyses. For our attachment variables, it is clear that the distribution of scores on the scale measuring anxiety in the attachment relationship with mother is positively skewed and kurtotic, with the raw statistics for skewness and kurtosis both being over 1.3. This suggests that the vast majority of participants in the sample have low anxiety in their attachment relationships with their mothers. The distribution of scores on avoidance in relation to mother is also positively skewed, suggesting low avoidance in this sample. Considering attachment to father, the distribution of scores on avoidance is positively skewed. Again, this suggests relatively low levels of avoidance in the attachment relationship to father in the majority of the sample. These findings are to be expected considering the high percentage of participants who have reported secure attachment to both parents in previous research (Lopez & Hsu, 2002, Kenny & Sirin, 2006) and the scale’s truncated range of scores. A square root transformation was applied to these variables with the effect that skewness and kurtosis was eliminated on all four attachment variables. In order to apply the square root transformation, a constant was added to each variable to ensure the scores were all positive and thus, a square root transformation could be applied. The correlations between the original attachment anxiety and avoidance variables and the respective transformed variables were all very high \( r > .99, p < .001 \). None of the other main variables had problematic skewness or kurtosis statistics.

Homoscedasticity and linearity were also examined by way of scatterplots. Plots of each IV on the family satisfaction DV’s were examined to rule out heteroscedasticity. Based on a careful graphical examination, it appears that each IV has near equal variance across the DV’s.
It also appears that each IV has a linear or near linear relationship with the family satisfaction DV’s. Further examination of the assumptions (i.e., normality of the variate) will be conducted after the regression models have been calculated.

**Preliminary Analyses**

A *T*-test was conducted to examine the mean differences between males and females on the dependent variables. Results reveal that males report higher levels of family life satisfaction ($M = 27.71$, $SD = 5.25$) than females ($M = 25.65$, $SD = 5.98$). This suggests that males are more satisfied with their families’ ability to provide a sense of connectedness while simultaneously encouraging the development of autonomy. Males did not differ significantly from females in their ratings satisfaction with perceived levels of cohesion and adaptability in their families, nor did they differ in mean ratings of overall family satisfaction (satisfaction with cohesion and adaptability and connectedness and autonomy combined).

To examine the question of whether ethnicity influenced the results, a one-way analysis of variance (ANOVA) was conducted for each dependent variable. The findings reveal statistically significant effects of ethnicity on family satisfaction, $F(4, 227) = 3.38, p < .05$, and family life satisfaction, $F(4, 227) = 4.42, p < .005$. Due to differences in samples sizes for ethnicity and the potential for unequal variances Games-Howell post hoc analyses were conducted. The results suggested that for family satisfaction, differences lay between the African American ($M = 41.02$; ranged from 17 to 70) and Caucasian ($M = 48.63$; ranged from 14 to 70) groups. For family life satisfaction, there were also differences between African Americans ($M = 22.71$, ranged from 8 to 34) and Caucasians ($M = 27.11$, ranged from 10 to 35); and also Asian Americans ($M = 26.66$, ranged from 21 to 34). When the two dependent variables are combined to represent overall family satisfaction, ethnicity still demonstrates a
significant effect \( F(4, 225) = 4.11, p < .005 \). Again, the differences were found to be between those who identified as African American and those who identified as Caucasian.

To examine the effects of family status on the dependent variables, a one way analysis of variance was conducted on each dependent variable. The results reveal a main effect of family status on family satisfaction, \( F(3, 228) = 5.69, p < .005 \), and a near significant effect of family life satisfaction, \( F(3, 228) = 2.62, p = .051 \). Games-Howell post hoc analyses were run for both dependent variables and revealed that individuals from intact families (\( M = 48.80; \) ranged from 17 to 70) report significantly higher mean levels of family satisfaction than all other family types (i.e., separated/divorced (\( M = 42.48; \) ranged from 21 to 70), step-families (\( M = 42.97; \) ranged from 14 to 68), single parent (\( M = 39.88; \) ranged from 28 to 50), and that individuals from intact families report significantly higher mean levels of family life satisfaction (\( M = 26.71; \) ranged from 7 to 35) than individuals from separated/divorced families (\( M = 24.02; \) ranged from 10 to 34). When the two dependent variables were combined to represent overall family satisfaction, there is still a significant effect of family status, \( F(3, 226) = 5.69, p = .001 \), with individuals from intact families reporting higher mean levels of overall family satisfaction that individuals from all other family types.

To see if primary source of social support influenced the results, a one way analysis of variance was conducted for the dependent variables. Results revealed a main effect of social support on family satisfaction, \( F(6, 225) = 2.48, p < .05 \). However, Games-Howell post hoc analyses did not identify any significant between group differences, therefore a more powerful Hotchberg’s GT2 was utilized (which is appropriate because of the different samples sizes and a non-significant test of homogeneity of variances) and revealed significant differences on mean levels of family satisfaction between individuals who report their mothers’ are their primary
social support ($M = 47.93$; ranged from 21 to 70) and those who indicate that their boyfriend/girlfriend is their primary social support ($M = 39.79$; ranged from 14 to 64). When the two dependent variables were combined to represent overall family satisfaction, primary source of social support still demonstrated a significant effect, $F(6, 223) = 2.83, p < .05$, with individuals who report their mother’s to be their primary social support reporting higher levels of overall family satisfaction that individuals who report their boyfriend/girlfriend to be their primary source of social support.

**Scale Reliability**

Estimates of internal consistency were examined for the Open and Problem subscales and total scale on the PAC (Mother) and PAC (Father), with the alpha coefficients for the scale relating to communication with Mother as follows: .93 for the Open Communication subscale, .81 for the Problem Communication subscale, and .92 for the total score on the PAC (mother). In relation to communication with Father, the alpha coefficients were as follows: .93 for the Open Communication subscale, .82 for the Problem Communication subscale, and .92 for the total score on the PAC (Father). These alpha coefficient estimates are higher than those reported in the initial validation studies (Barnes & Olson, 1982) and comparable to those reported in more recent studies (e.g., Berrios-Allison, 2005). When all of the items are combined regardless of the referent (i.e., mother or father), the alpha coefficient for Total Parent-Adolescent Communication was .93.

Collecting data at time 2 allows for an estimation of the test-retest reliability. For the measures of communication with mother, the correlation between scores at time 1 and scores at time 2 were .92 for Open Communication, .84 for Problem Communication, and .93 for Total Communication. In relation to father, the correlations were .88 for Open Communication, .85
for Problem Communication, and .88 for Total Communication. All of these test-retest reliability coefficients are considered to be satisfactory for statistical testing.

An estimate for internal consistency was also examined for the conformity orientation subscale of the Revised Family Communication Patterns instrument. The alpha coefficient for the conformity orientation subscale of the RFCP was .87. This estimate is higher than the estimate reported in the initial validation study (i.e., .76, Ritchie & Fitzpatrick, 1990) and may be attributable to the fact that the current sample is homogeneous in terms of age and, presumably, developmental stage, whereas the original sample consisted of 7th, 9th, and 11th graders. When the reliability coefficient for just the 11th graders in the Ritchie and Fitzpatrick (1990) study is considered (.83), it is much closer to the reliability in the current sample. The test-retest reliability coefficient for Conformity was .80.

Estimates of the internal consistency reliability were examined for the cohesion and adaptability subscales and the total scale score of the Family Satisfaction Scale (FSS), as well as for the Adolescent Family Life Satisfaction Index (AFLSI). Estimated alpha coefficients were as follows: .87 for the cohesion subscale of the FSS, .89 for the adaptability subscale of the FSS, and .93 for the total scale score on the FSS. These three reliability estimates are comparable to those reported in the original validation studies (Olson & Wilson, 1982). The estimated alpha coefficient for the AFLSI was .88, which is precisely the same estimate reported in the initial validation study (Henry, Ostrander, & Lovelace, 1992). When all items from both satisfaction scales are combined, the resulting internal consistency reliability estimate is .95. Since the aim of the current study is to assess factors that contribute to an overall sense of family satisfaction, and because it makes theoretical and statistical sense to combine the family satisfaction measures into an overall more reliable and inclusive measure, the family satisfaction scales were combined.

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to form a new Overall Satisfaction with Family scale that demonstrated acceptable internal consistency reliability (alpha = .94).

Test-retest reliabilities for the satisfaction scales were satisfactory. For the Family Satisfaction Scale, the correlation coefficients between time 1 and time 2 scores were .86 for the Cohesion subscale, .89 for the Adaptability subscale, and .90 for the Total Scale score. The test-retest reliability coefficient for the AFLSI was .81, and Overall Family Satisfaction demonstrated a correlation of .90 between scores at time 1 and time 2. Again, all of these coefficients are satisfactory for the purposes of statistical testing.

Due to the way in which the attachments scales were calculated, internal consistency reliability could not be estimated. However, test-retest reliability coefficients will be reported here. For attachment anxiety in relation to mother, the correlation between time 1 and time 2 scores was .64. For attachment avoidance in relation to mother, the correlation between time 1 and time 2 scores was .78. For attachment anxiety in relation to father, the correlation between time 1 and time 2 scores was .55. For attachment avoidance in relation to father, the correlation between time 1 and time 2 scores was .84. This suggests that the 6 – 8 week test-retest reliability for attachment avoidance is satisfactory as measured with the difference method based on the P-AASQ. However, measuring attachment anxiety with the difference method based on the P-AASQ across a 6-8 week period is either unreliable or suggests that attachment anxiety may tend to shift across time.

**Intercorrelations**

Table 4-1 shows the correlation coefficients for the main variables in the study. Most of the variables are significantly correlated in the expected directions, however there are a few potentially problematic correlations considering that multiple regression will be the main analyses used in this study. The high negative correlation between attachment avoidance in
relation to mother and parent-adolescent communication with mother is in the expected
direction, but may pose multicollinearity issues for the main analyses considering these two
variables share almost 50% variance. Similarly, the high negative correlation between
attachment avoidance in relation to father and parent-adolescent communication with father
present multicollinearity concerns. The moderate negative correlation between attachment
anxiety in relation to mother and parent-adolescent communication with mother could also pose
multicollinearity concerns, although the degree of correlation between these two variables is less
severe. Finally, the high correlation between parent-adolescent communication and the main
dependent variable (family satisfaction) could present a problem since parent-adolescent
communication with mother accounts for nearly 48% of the variance in family satisfaction.

**Descriptive Statistics**

Table 4-2 contains the name, mean, standard deviation, skewness and kurtosis statistics,
and range of scores for each IV and both family satisfaction DV’s. The descriptive data for the
communication and family satisfaction measures are consistent with those found in the validation
studies for each measure (Barnes & Olson, 1982; Ritchie & Fitzpatrick, 1990; Olson & Wilson,
1982; Henry, Ostrander, & Lovelace, 1992). Because this is the first study utilizing the
difference method to create two continuous dimensions, there are no previous data with which to
compare the current sample data. However, the percentage of individuals who endorsed (“best
choice”) secure, preoccupied, dismissing, and fearful attachment with mother and father,
respectively, is consistent with previous research using the P-AASQ (Behrens & Lopez, 1998).

**Hypothesis Testing**

**Attachment and Family Satisfaction.**

In order to test the first hypothesis, that there will be a relationship between working
models of attachment and family satisfaction, family satisfaction was regressed upon attachment
anxiety and avoidance separately for mother and father, controlling for gender, ethnicity, family status and social status. The results indicate that considering the relationship with mother, the model was significant, \( F(16, 209) = 12.87, p < .001 \), and accounted for 45% of the variance in family satisfaction scores. Both predictors were significant \( (p < .001) \), but avoidance was found to have a larger impact on family satisfaction (standardized \( \beta = -.414 \); anxiety standardized \( \beta = -.281 \)). When considering the relationship with father, the regression model was also significant, \( F(16, 203) = 8.27, p < .001 \), and accounted for 34% of the variance in family satisfaction. Again, both predictors were significant \( (p < .001) \), but in this case, anxiety was found to have a larger impact on family satisfaction (standardized \( \beta = -.300 \); avoidance standardized \( \beta = -.280 \)). The model was also run when considering relationship with both mother and father, and that model was found to be significant, \( F(18, 200) = 15.96 \), and accounted for 55% of the variance in family satisfaction (see Table 4-3). Attachment anxiety and avoidance in relation to both mother and father were all found to be significant predictors, with attachment avoidance in the relationship with mother accounting for the most variance in the model (standardized \( \beta = -.368 \)), followed by attachment anxiety in relationship with mother (standardized \( \beta = -.238 \)), attachment anxiety in relationship with father (standardized \( \beta = -.222 \)), and attachment avoidance in relationship with father (standardized \( \beta = -.203 \)). Although the regression model is significant when only the demographic variables are entered in block one, none of the demographic variables remain as significant predictors in the model when the attachment variables are included. These results offer support for hypothesis 1 and suggest that attachment anxiety and avoidance in relationship with mother and, separately, with father predict concurrent family satisfaction in emerging adults. The negative coefficients suggest that higher attachment anxiety and/or avoidance in relationship with mother and/or father is related to lower levels of family satisfaction.
Attachment and satisfaction with family cohesion and adaptability. When considering, particularly, satisfaction with perceived cohesion and adaptability in the family (as opposed to overall family satisfaction) regressed upon the attachment variables, the results are similar. The model is significant, $F(18, 200) = 14.04, p < .001$, and accounts for nearly 52% of variance in satisfaction with family cohesion and adaptability. Attachment anxiety and avoidance with both mother and father all demonstrate predictive significance in the model with a $p$ value equal to or less than .001. Attachment avoidance in the relationship with mother is the strongest predictor (standardized $\beta = -.328$) followed by attachment anxiety in the relationship with mother (standardized $\beta = -.257$), attachment anxiety in the relationship with father (standardized $\beta = -.223$), and attachment anxiety in the relationship with father (standardized $\beta = -.197$).

Attachment and family life satisfaction (connectedness and autonomy). When considering, particularly, family life satisfaction (i.e., participants’ satisfaction with the ability of the family to promote a sense of connectedness while simultaneously promoting a sense of autonomy) regressed upon the attachment variables, the model is again significant, $F(18, 200) = 10.25, p < .001$, and accounts for 43% of the variance in family life satisfaction. Both dimensions of attachment in relationship with both parents are again significant, although not to the same degree. Attachment avoidance in relationship with mother accounts for the most unique variance in the model ($\beta = -.381, p < .001$), followed by attachment anxiety in relationship with father ($\beta = -.179, p = .005$), attachment avoidance in relationship with father ($\beta = -.178, p = .007$) and attachment anxiety in relationship with mother ($\beta = -.157, p = .019$).

Family Communication and Family Satisfaction.

The second hypothesis, that perceived communication patterns will significantly relate to family satisfaction, was tested by regressing family satisfaction on parent-adolescent
communication with mother and father, as well as perceived conformity orientation, again controlling for gender, ethnicity, family status, and social support. The resulting model was significant, \( F(17, 208) = 21.83, p < .001 \), and accounted for 61% of the variance in family satisfaction scores. As shown in Table 4-4, when different aspects of parent-emerging adult communication are considered separately, communication with mother accounted for the most variance in the model (\( \beta = .528, p < .001 \)), followed by communication with father (\( \beta = .293, p < .001 \)), and conformity orientation (\( \beta = -.140, p = .004 \)).

When open and problem communication are considered separately, the regression model accounts for more variance in family satisfaction scores (\( R^2 = .65 \)) and remains significant, \( F(19, 206) = 23.22, p < .001 \). Open communication with mother accounts for the most variance in the model (\( \beta = .540, p < .001 \)), followed by open communication with father (\( \beta = .251, p < .001 \)) and conformity orientation (\( \beta = -.189, p < .001 \)), while problem communication with mother and father both fail to reach significance (\( \beta = .030 \& .075, p = .603 \& .160 \), respectively). These results offer support for hypothesis two, that communication within the family will predict concurrent family satisfaction, and suggest that higher perceived levels of open communication and lower perceived levels of conformity orientation are associated with higher levels of family satisfaction.

**Family communication and satisfaction with cohesion and adaptability.** When considering, particularly, satisfaction with family cohesion and adaptability regressed upon the family communication variables, the model is significant, \( F(17, 208) = 19.02, p < .001 \), and accounts for 57% of the variance in satisfaction with family cohesion and adaptability. Communication with mother accounts for the most unique variance in the model (\( \beta = .543, p < .001 \)).
.001), followed by communication with father ($\beta = .270, p < .001$), and conformity orientation (standardized $\beta = -.109, p = .030$).

**Family communication and family life satisfaction.** When considering, particularly, participants’ perceived family life satisfaction regressed upon the communication variables, the model is significant, $F(17, 208) = 12.98, p < .001$, and accounts for 47% of the variance in family life satisfaction scores. When considering this aspect of family satisfaction, communication with mother accounts for the most unique variance in the model ($\beta = .401, p < .001$), followed by communication with father ($\beta = .284, p < .001$), and conformity orientation ($\beta = -.178, p = .002$).

**Attachment and Communication.**

Based on the beta-weights from the regression analyses used to examine the first two hypotheses, variables were entered into a hierarchical regression equation with overall family satisfaction as the dependent variable. Results are presented in Table 4-5. After controlling for demographic variables (which accounted for 16% of the variance in family satisfaction), communication with mother was entered in the first step and accounted for a significant amount of variance in family satisfaction ($R^2 = .51, R^2$ change = .35, $F(15,203) = 16.66, p < .001$). In the second step, attachment avoidance in relationship with mother explained additional significant variance after controlling for the variance accounted for by communication with mother ($R^2 = .53, R^2$ change = .011, $F(16,202) = 16.36, p < .001$). In the third step, communication with father was found to explain significant additional variance in family satisfaction after controlling for the variance accounted for by communication and attachment avoidance with mother ($R^2 = .60, R^2$ change = .07, $F(17, 201) = 20.36, p < .001$). In the fourth step, attachment anxiety in relationship with mother accounted for significant additional variance after controlling for communication with mother and father and attachment avoidance with
mother ($R^2 = .61$, $R^2$ change = .016, $F(18, 200) = 20.56, p < .001$). In the fifth step, attachment anxiety in relationship with father accounted for significant additional variance in family satisfaction after controlling for the variance accounted for by communication with mother and father, and attachment avoidance and anxiety with mother ($R^2 = .62$, $R^2$ change = .01, $F(19, 199) = 20.39, p < .001$). In the sixth step, attachment avoidance in relationship with father did not account for significant additional variance in family satisfaction after controlling for the variance accounted for by communication with mother and father, attachment avoidance and anxiety with mother and father ($R^2 = .62$, $R^2$ change < .01, $F(20, 198) = 19.30, p = p < .001$). In the final step, conformity orientation accounted for significant additional variance after controlling for the variance accounted for by communication with mother and father, and attachment anxiety and avoidance with mother and father ($R^2 = .64$, $R^2$ change = .013, $F(21, 197) = 19.44, p < .001$). These results provide partial support for the hypothesis that attachment and communication variables will demonstrate the prediction of unique variance in family satisfaction. One interesting trend is noted in the hierarchical regression results, when conformity orientation is added to the model, Asian American ethnicity becomes a significant predictor in the model.

**Testing for moderation.** Potential moderator effects were investigated by regressing family satisfaction on the communication variable in the first step, the attachment variable in the second step, and the moderator variable in the third step. A significant moderator effect was seen in the moderator variable representing the interaction of parent-adolescent communication with father and attachment avoidance in the relationship with father. After controlling for demographic variables, as well as communication with father, and attachment avoidance in relationship with father, the moderator variable (representing the interaction term of parent-adolescent communication with father and attachment avoidance in relationship with father)
accounted for additional variance in the model ($R^2 = .44, R^2$ change = .01, $F(18, 201) = 10.89, p = .015$), and parent-adolescent communication with father demonstrates a stronger influence on family satisfaction (standardized $\beta$ increases from .354 to .962). Thus, it appears that attachment avoidance in relation to father demonstrates moderational properties as it strengthens the relationship between parent-adolescent communication with father and overall family satisfaction. Based on conversions of $r^2$ to Cohen’s $d$ (Cohen, 1988, as cited in Henson, 2006), this represents a small effect size. There were no other attachment variables that demonstrated significant moderator effects on the relationship between any of the other communication variables and family satisfaction. It is important to note that, due to the exploratory nature of this research, family-wise error corrections were not made. A priori hypotheses in this research which require analyses that would accommodate family-wise error corrections were based on theoretical rather than empirical grounds, the exclusion of Bonferroni or other family-wise error corrections can be argued. In addition, O’Keefe (2003) and Tutzauer (2003) make provocative perspectives on the exclusion and/or sensible application of family-wise error corrections in statistical testing.

**Longitudinal Results**

Utilizing the longitudinal data collected for this study, exploratory analyses were run to investigate additional research questions. First, to investigate, with a more causal lens, whether attachment and communication predict later family satisfaction, time 2 family satisfaction was regressed upon attachment time 1 anxiety and avoidance in relation to mother. After controlling for single parent family status, the model is significant, $F(3, 46) = 11.46, p = .001$, and accounts for 39% of the variance in time 2 family satisfaction. Attachment avoidance is a stronger predictor in the model ($\beta = -.382, p < .005$) than was attachment anxiety ($\beta = -.284, p < .05$). In relation to father, when time 2 family satisfaction is regressed upon time 1 attachment anxiety
and avoidance after controlling for single parent family status, the model is significant $F(3, 46) = 7.49, p = .001$, and accounts for 28% of the variance in time 2 family satisfaction. However, in this case, only avoidance is a significant predictor in the model ($\beta = -.330, p < .05$). Attachment avoidance in relation to father does show a trend toward significance ($\beta = -.254, p = .058$) and perhaps a larger repeated measures sample would reveal a significant relationship.

To test the predictive ability of communication on family satisfaction across time, family satisfaction at time 2 was regressed upon time 1 parent-adolescent communication and conformity orientation. When considering communication with mother, the regression model is significant, $F(3, 46) = 17.47, p < .001$, and accounts for 50% of the variance in time 2 family satisfaction. Parent-adolescent communication with mother is a significant predictor ($\beta = .621, p < .001$), but conformity orientation is not. When considering parent-adolescent communication with father and conformity orientation, the model is significant $F(3, 46) = 8.824, p < .001$, and accounts for 32% of the variance in time 2 family satisfaction. This time, parent-adolescent communication is a significant predictor ($\beta = .388, p = .002$), as is conformity orientation ($\beta = -.248, p < .05$).

To examine whether attachment avoidance in relation to mother and parent-adolescent communication with mother and father each add unique variance to time 2 family satisfaction, parent-adolescent communication with mother, attachment avoidance in relation to mother, and parent-adolescent communication with father were entered into a hierarchical regression with time 2 family satisfaction as the outcome variable. After controlling for single parent family status, in the first step parent-adolescent communication with mother accounted for significant additional variance in the model, ($R^2 = .51, R^2$ change = .43, $F(2, 47) = 26.46, p < .001$). In the second step, attachment avoidance in relation to mother does not account for additional variance
in the model. The remaining steps also do not account for additional variance in the model. Again, single parent family status remains a significant predictor. These results suggest that communication with mother has a large effect on family satisfaction scores.

**Moderator effects.** To test for possible moderator effects of attachment in the predictive relationship between parent-adolescent communication and family satisfaction, time 2 satisfaction is regressed upon time 1 communication, attachment, and the attachment/communication interaction term. The interaction term representing attachment anxiety and parent-adolescent communication in relation to mother was found to be a significant moderator variable $R^2 = .53$, $\Delta R^2 = .031$, $F(4, 45) = 14.94$, $p < .05$. This represents a small effect size (Henson, 2006). When the moderator variable was entered into the equation, the relationship between parent-adolescent communication with mother and family satisfaction strengthened ($\beta$ increased from .611 to 1.583). In addition, the interaction term representing attachment avoidance and parent-adolescent communication in relation to father demonstrated a trend toward significance $F(4, 45) = 6.247$, $p = .10$. A power analysis using G*Power suggests that a sample size of $N = 314$ would result in that interaction term accounting for significant additional variance in the prediction of time 2 family satisfaction with .80 power at a $p < .05$ significance level.

**Effect Sizes**

Overall, based on $r^2$ coefficients and Cohen’s (1988, as cited in Henson, 2006) standards, the results of this study suggest that communication with mother has a large effect on family satisfaction scores. Communication with father appears to have a moderate effect on family satisfaction scores, while attachment and conformity orientation have, at best, small effects. In addition, analyses of moderator effects that returned significant results reveal small effects of the interaction terms on the relationship between communication and family satisfaction. These
effect sizes represent statistical conventions while the practical implications of these effect sizes are more subjective. The impact of communication with mother remains large no matter what perspective is taken. However, if we consider attachment for example, accounting for 1% of additional variance exploring each attachment and communication variables individually, the practical significance seems low. However, if communication and attachment variables are considered as separate blocks of variables, accounting for 23% of the variance in family satisfaction now seems to be practically significant.
<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Attachment Anxiety (Mother)†</td>
<td></td>
<td>.43**</td>
<td>.46**</td>
<td>0.01</td>
<td>.68**</td>
<td>-0.18</td>
<td>.53**</td>
<td>.38**</td>
</tr>
<tr>
<td>2 Attachment Avoidance (Mother)†</td>
<td>.44**</td>
<td></td>
<td>0.11</td>
<td>.33*</td>
<td>.76**</td>
<td>-0.26</td>
<td>.42**</td>
<td>.61**</td>
</tr>
<tr>
<td>3 Attachment Anxiety (Father)†</td>
<td>.33**</td>
<td>0.12</td>
<td></td>
<td>0.17</td>
<td>.39**</td>
<td>.51**</td>
<td>.36*</td>
<td>.35**</td>
</tr>
<tr>
<td>4 Attachment Avoidance (Father)†</td>
<td>.14*</td>
<td>.24**</td>
<td>.45**</td>
<td></td>
<td>-0.23</td>
<td>.79**</td>
<td>0.13</td>
<td>.48**</td>
</tr>
<tr>
<td>5 PAC (Mother)</td>
<td>.64**</td>
<td>.70**</td>
<td>.26**</td>
<td>.32**</td>
<td></td>
<td>.32**</td>
<td>.62**</td>
<td>.70**</td>
</tr>
<tr>
<td>6 PAC (Father)</td>
<td>-.15*</td>
<td>.26**</td>
<td>.52**</td>
<td>.70**</td>
<td>.38**</td>
<td></td>
<td>-.30*</td>
<td>.53**</td>
</tr>
<tr>
<td>7 Conformity Orientation</td>
<td>.25**</td>
<td>.15*</td>
<td>.25**</td>
<td>0.09</td>
<td>.35**</td>
<td>.26**</td>
<td></td>
<td>.52**</td>
</tr>
<tr>
<td>8 Family Satisfaction</td>
<td>.51**</td>
<td>.53**</td>
<td>.44**</td>
<td>.46**</td>
<td>.69**</td>
<td>.56**</td>
<td>.39**</td>
<td></td>
</tr>
</tbody>
</table>

N Time 1: 232 232 224 224 232 224 233 233  
N Time 2: 49 49 47 47 49 47 50 50

Note: Below diagonal = time 1 correlations; Above diagonal = time 2 correlations; † = after square root transformation; PAC = Parent-Adolescent Communication (total scale score); N = sample size; * p < .05, ** p < .001
Table 4-2. Descriptive Statistics for Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>SK</th>
<th>K</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Anxiety (Mother)</td>
<td>-3.58</td>
<td>3.36</td>
<td>1.34</td>
<td>1.75</td>
<td>-10.00 – 10.00</td>
</tr>
<tr>
<td>-Square Root transformation</td>
<td>2.85</td>
<td>0.54</td>
<td>0.84</td>
<td>0.64</td>
<td>1.41 – 4.69</td>
</tr>
<tr>
<td>Attachment Avoidance (Mother)</td>
<td>-2.67</td>
<td>3.9</td>
<td>1.12</td>
<td>0.48</td>
<td>-10.00 – 10.00</td>
</tr>
<tr>
<td>-Square Root transformation</td>
<td>2.98</td>
<td>0.61</td>
<td>0.60</td>
<td>0.17</td>
<td>1.00 – 4.69</td>
</tr>
<tr>
<td>Attachment Anxiety (Father)</td>
<td>-2.69</td>
<td>3.17</td>
<td>0.59</td>
<td>-0.48</td>
<td>-9.00 – 6.00</td>
</tr>
<tr>
<td>-Square Root transformation</td>
<td>3</td>
<td>0.51</td>
<td>0.31</td>
<td>-0.77</td>
<td>1.73 – 4.24</td>
</tr>
<tr>
<td>Attachment Avoidance (Father)</td>
<td>-1.64</td>
<td>4.4</td>
<td>1.2</td>
<td>0.73</td>
<td>-8.00 – 12.00</td>
</tr>
<tr>
<td>-Square Root transformation</td>
<td>3.16</td>
<td>0.65</td>
<td>0.75</td>
<td>-0.08</td>
<td>2.00 – 4.90</td>
</tr>
<tr>
<td>Family Communication (Mother)</td>
<td>68.69</td>
<td>15.02</td>
<td>-0.28</td>
<td>-0.59</td>
<td>28.00 – 99.00</td>
</tr>
<tr>
<td>Family Communication (Father)</td>
<td>65.93</td>
<td>15.56</td>
<td>-0.14</td>
<td>-0.39</td>
<td>24.00 – 97.00</td>
</tr>
<tr>
<td>Conformity Orientation</td>
<td>43.59</td>
<td>12.87</td>
<td>0.18</td>
<td>-0.39</td>
<td>11.00 – 77.00</td>
</tr>
<tr>
<td>Family Satisfaction</td>
<td>46.6</td>
<td>11.72</td>
<td>0.03</td>
<td>-0.32</td>
<td>14.00 – 70.00</td>
</tr>
<tr>
<td>Family Life Satisfaction</td>
<td>25.97</td>
<td>5.88</td>
<td>-0.64</td>
<td>0.1</td>
<td>7.00 – 35.00</td>
</tr>
<tr>
<td>Overall Family Satisfaction</td>
<td>72.92</td>
<td>16.31</td>
<td>-0.09</td>
<td>-0.4</td>
<td>28.00 – 105.00</td>
</tr>
</tbody>
</table>

Table 4-3. Multiple Regression Analysis Using Attachment to Predict Family Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Anxiety (Mother)</td>
<td>-7.23</td>
<td>1.79</td>
<td>-0.238</td>
<td>-4.04***</td>
</tr>
<tr>
<td>Attachment Avoidance (Mother)</td>
<td>-10.07</td>
<td>1.61</td>
<td>-0.368</td>
<td>-6.23***</td>
</tr>
<tr>
<td>Attachment Anxiety (Father)</td>
<td>-7.11</td>
<td>1.79</td>
<td>-0.222</td>
<td>-3.96***</td>
</tr>
<tr>
<td>Attachment Avoidance (Father)</td>
<td>-5.18</td>
<td>1.47</td>
<td>-0.203</td>
<td>-3.52***</td>
</tr>
</tbody>
</table>

***p ≤ .001

Table 4-4. Multiple Regression Analysis Using Communication to Predict Family Satisfaction

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAC (Mother)</td>
<td>0.575</td>
<td>0.058</td>
<td>0.528</td>
<td>9.88***</td>
</tr>
<tr>
<td>PAC (Father)</td>
<td>0.305</td>
<td>0.052</td>
<td>0.293</td>
<td>5.92***</td>
</tr>
<tr>
<td>Conformity Orientation</td>
<td>-0.18</td>
<td>0.061</td>
<td>-0.14</td>
<td>-2.93**</td>
</tr>
</tbody>
</table>

Note: PAC = parent-adolescent communication; **p < .005, ***p < .001
Table 4-5. Hierarchical Regression Analyses Showing Amount of Unique Variance in Family Satisfaction Accounted for by Attachment and Communication

<table>
<thead>
<tr>
<th>Step</th>
<th>$R$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>F(15, 203)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: PAC (Mother)</td>
<td>0.74</td>
<td>0.51</td>
<td>0.23</td>
<td>16.66*</td>
</tr>
<tr>
<td>Step 2: Att. Avoidance (Mother)</td>
<td>0.75</td>
<td>0.53</td>
<td>0.02</td>
<td>16.36*</td>
</tr>
<tr>
<td>Step 3: PAC (Father)</td>
<td>0.79</td>
<td>0.6</td>
<td>0.07</td>
<td>20.36*</td>
</tr>
<tr>
<td>Step 4: Att. Anxiety (Mother)</td>
<td>0.8</td>
<td>0.61</td>
<td>0.016</td>
<td>20.56*</td>
</tr>
<tr>
<td>Step 5: Att. Anxiety (Father)</td>
<td>0.81</td>
<td>0.62</td>
<td>0.01</td>
<td>20.39*</td>
</tr>
<tr>
<td>Step 6: Att. Avoidance (Father)</td>
<td>0.81</td>
<td>0.62</td>
<td>0</td>
<td>19.30*</td>
</tr>
<tr>
<td>Step 7: Conformity Orientation</td>
<td>0.82</td>
<td>0.64</td>
<td>0.013</td>
<td>19.44*</td>
</tr>
</tbody>
</table>
CHAPTER 5
DISCUSSION

The results of this study may be interpreted as supporting the existence of a relationship between emerging adult-parent attachment, family communication patterns, and family satisfaction. Results support the hypothesis that attachment anxiety and avoidance predict concurrent levels of family satisfaction. Results support the second hypothesis that perceived patterns of family communication predict concurrent levels of family satisfaction. Results also support the hypothesis that attachment anxiety and avoidance, as well as patterns of family communication, demonstrate independent effects in predicting concurrent levels of family satisfaction. Finally, results provide partial support for the hypothesis that attachment anxiety and avoidance will moderate the relationship between patterns in family communication and concurrent levels of family satisfaction.

Attachment

Based on the current sample of data, the hypothesized relationship between attachment and family satisfaction was fully supported. Participants who report higher levels of attachment anxiety report lower levels of overall family satisfaction. Similarly, participants who report higher levels of avoidance in attachment with parents, report lower levels of family satisfaction. These findings are in line with previous research that found attachment style to be related to family satisfaction in emerging adults (Lopez & Hsu, 2002) and attachment anxiety and avoidance to be negatively related to relationship quality in adults (Noftle & Shaver, 2006). The relationship of attachment with family satisfaction seems to be different for attachment in relation to mother versus attachment in relation to father. In relation to mother, attachment avoidance appears to have a stronger relationship with family satisfaction than attachment anxiety. However, in relation to father, attachment anxiety appears to have a stronger
relationship with family satisfaction. Again, this finding echoes previous literature that has highlighted differences in the attachment relationship with mothers and fathers (e.g., Main & Weston, 1981).

These findings add to the research literature in some important ways. First, previous studies examining attachment and relationship satisfaction are found primarily in the literature on romantic relationships. This study offers strong support for the relationship between parental attachment in a sample of emerging adults and self-reported family satisfaction. Second, the finding that there is a differential relationship of attachment to family satisfaction depending on who the attachment referent is, may suggest specific dimensions (i.e., anxiety and avoidance) that are more salient in the relationship with mother compared to the relationship with father, and vice versa. Perhaps attachment anxiety, or working model of self, is more salient in the relationship with father and attachment avoidance, or working model of other, is more salient in the relationship with mother. There are a number of plausible explanations for this finding, but in consideration of conciseness, one will be posited here. According to attachment theory, a broad conceptualization of a working model of self (i.e., attachment anxiety) is “whether or not the self is judged to be the sort of person towards whom anyone, and the attachment figure in particular, is likely to respond in a helpful way” (Bowlby, 1973, p. 204). The other dimension, referred to as a working model of other (i.e., attachment avoidance), is the extent to which “the attachment figure is judged to be the sort of person who in general responds to calls for support and protection” (p. 204). Thus, perhaps the attachment relationship with mother, which typically develops first, is based more on the other who is necessary for the provision of basic needs. An attachment relationship characterized by avoidance may follow. The attachment relationship with father however, which may emerge after a stronger self or identity has developed, may be
more related to whether or not the self is judged to be worthy to be responded to in a supportive and protective way. Attachment anxiety in relation to father may be based on a relationship that is thus, more influenced by the self.

Another important contribution of this study is that, although the difference method (Griffin & Bartholomew, 1994) has been used successfully with the RQ (Bartholomew & Horowitz, 1991) by Sibley and Liu (2006), this study is the first to utilize the method with a measure based on the RQ but designed to measure adolescents’ attachment style in relation to parents, the P-AASQ (Behrens & Lopez, 1998). The distribution of scores on the adapted P-AASQ was a bit abnormal, but considering the high percentage of individuals who report secure attachment with their parents, the potential for skewness seems high. After transforming the data, the skewness and kurtosis statistics were not problematic, however, future studies utilizing the difference method to score the P-AASQ may want to consider various options for utilizing the measure, such as the continuous scores for each attachment style, or the concordant-discordant system utilized in the original study using the P-AASQ (Behrens & Lopez, 1998).

**Family Communication**

Based on the current sample of data, the hypothesized relationship between perceived patterns of family communication and concurrent levels of family satisfaction was fully supported. Individuals who reported higher levels of open communication with their mothers and fathers also reported higher levels of family satisfaction. Individuals who reported lower levels of conformity orientation in their families reported higher levels of family satisfaction. Parent-adolescent communication with mother had the strongest relationship, followed by parent-adolescent communication with father, and conformity orientation. The findings based on this sample of emerging adults from the United States are in line with previous research that has found open communication to be positively related to family satisfaction in young to older
adolescents (e.g., Caprara, Pastorelli, Regalia, Scabini, & Bandura, 2005; Serewicz, Dickson, Morrison, & Poole, 2007), or emerging adults outside of the United States (Scabini, Lanz, & Marta, 1999). This may be the first study to examine conformity orientation as an independent variable in relation to family satisfaction, although the correlation is in the expected direction.

Taken together with the results from testing the hypothesis related to attachment, it appears that, in the current sample when it comes to family satisfaction, the relationship with mother is more influential than the relationship with father; both appear to relate to family satisfaction. This isn’t surprising considering that adolescents have reported that they talk more with their mothers than their fathers (Youniss & Smollar, 1985) and college students’ suicidality was more strongly predicted by maternal expectations and communication that paternal (Miller & Day, 2002).

Problem communication, which is an aspect of family communication as conceptualized by Barnes and Olson (1982) did not appear to account for unique variance in family satisfaction when conformity orientation is also included in the model. This is not problematic, since the full-scale PAC is utilized most frequently in the research, but it does warrant some discussion. It is noteworthy that problem communication was a significant predictor of family satisfaction when conformity orientation was not included in the model. However, when conformity orientation is included in the model, problem communication becomes non-significant. One possible explanation for this is that, because conformity orientation and problem communication are correlated ($r = .38$ & .30, problem communication with mother and father, respectively) and are both designed to tap into potentially negative aspects of parent-child interaction, the limited variance that negative aspects of parent-child interaction can account for in family satisfaction may be better measured by conformity orientation.
Attachment and Family Communication

Based on the data from the current sample, the hypothesized unique relationship of attachment and communication with family satisfaction was supported. Parent-adolescent communication with both mother and father, conformity orientation, attachment anxiety in relation to both mother and father, and attachment avoidance in relation to mother all account for unique variance in family satisfaction. Only one independent variable, attachment avoidance in relation to father, did not account for unique variance in the dependent variable. This finding adds significantly to the research literature as it is a unique exploration of the contributions of interpersonal and intrapersonal contexts to family satisfaction. Although the attachment and communication variables are all significantly correlated with each other, they also demonstrate unique, additive contributions to the prediction of family satisfaction.

Examining family satisfaction – satisfaction with cohesion and adaptability, compared to family life satisfaction – satisfaction with simultaneously encouraging connectedness and autonomy, various aspects of communication and attachment appear to contribute in different ways. For example, when considering family satisfaction with cohesion and adaptability, attachment avoidance in relation to mother and conformity orientation are no longer significant predictors. In contrast, when considering family life satisfaction (satisfaction with simultaneously encouraging connectedness and autonomy) attachment anxiety and avoidance in relation to father are the only independent variables that do not account for significant additional variance in the dependent variable. Thus, attachment avoidance in general, and conformity orientation do not appear to play as large a role in directly explaining emerging adults’ level of satisfaction with their perceived level of cohesion and adaptability in the family.

How might these findings be explained? First, looking to the literature on marital satisfaction, it has been demonstrated previously that attachment anxiety is a stronger predictor
of relationship satisfaction than attachment avoidance (e.g., Butzer & Campbell, 2008, Feeney, 1994) and that mutuality in communication is more strongly associated with relationship satisfaction than coercive communication (Feeney, 1994). Additionally, research has shown that conformity orientation is associated with more regulatory and less confirming communicative behaviors, and is not associated with closeness or cohesion (Koerner & Fitzpatrick, 2002).

The attachment relationship with father, in general, does not appear to play as a large a role in explaining the level of satisfaction with the family’s ability to simultaneously promote a sense of connectedness and autonomy in the family life of an emerging adult (i.e., family life satisfaction). One possible explanation is that, even in very young children, the attachment relationship to father is characterized by a focus on exploration and independency, whereas the attachment relationship with mother is characterized by more of a focus on proximity and less independence (Mondonca, Cossette, Strayer, & Gravel, 2006). Consequently, during emerging adulthood, when major developmental tasks include establishing further independence and differentiation from parents, this process may be more salient (and challenging) in the context of attachment to mother and make attachment to mother more related to family life satisfaction, whereas the process of achieving a balance of autonomy and connection may be easier with fathers because it is more characteristic of the attachment relationship with fathers from early in life.

**Moderation of communication and satisfaction by attachment.** Based on the current data, the hypothesis that attachment moderates the relationship between communication and family satisfaction received limited partial support. Specifically, attachment avoidance in relation to father demonstrated a moderator effect on the relationship between parent-adolescent communication with father and family satisfaction. The result of including the moderator
variable in predicting family satisfaction is that the relationship between parent-adolescent communication and family satisfaction strengthens. Thus, considering the interaction of attachment avoidance and parent-adolescent communication with father allows for better prediction of concurrent levels of family satisfaction.

This finding is new to the emerging adult literature and provides partial support for a moderator hypothesis. This finding suggests that participants who are more highly avoidant in their attachment to their fathers are less likely to engage in positive communication with their fathers due to their attachment avoidance, which may subsequently have an even greater negative impact on their level of family satisfaction than communication would otherwise have alone. Considering none of the other attachment-communication interaction terms had a significant effect on predicting family satisfaction and the hypothesized interaction was with attachment avoidance and communication, not attachment anxiety, further research is needed to examine and replicate this moderator effect.

**Longitudinal Findings**

Longitudinal analyses were conducted utilized a smaller sample of the original participants \( n = 50 \) that was mostly female \( n = 43 \). Sixty-eight percent of the longitudinal sample was Caucasian \( n = 34 \), 10% was Hispanic, 8% Asian American, and 6% African American. As far as family status, 70% of the sample reported having an intact family. Finally, 44% of the longitudinal sample indicated that their mothers were their main source of social support and 22% indicated their fathers served as their primary social support.

Exploratory longitudinal data analyses suggest that attachment anxiety and avoidance in relation to mother are potential causal agents of later family satisfaction, as is attachment avoidance in relation to father. The results suggest that those who report higher levels of attachment avoidance in relation to mother or father or anxiety in relation to mother subsequently
report lower levels of family satisfaction. Perhaps individuals reporting less attachment avoidance or anxiety have expectations that they will be satisfied or experience or are able to engage in more satisfying patterns of communication. It is unclear why the stronger concurrently predictive attachment dimension in relation to father (i.e., anxiety/working model of self) is the only attachment dimension not significant in the longitudinal data. The fact that the distribution of scores on the attachment anxiety (father) variable for the longitudinal sample versus the full sample is much more skewed, may contribute to the lack of utility of that particular variable in the longitudinal equation.

Parent-adolescent communications with mother and with father both receive support as causal agents of later family satisfaction. Conformity orientation does not receive support as a causal agent of subsequent family satisfaction. However, as shown previously, all three of these factors do receive support as concurrent predictors of family satisfaction. Clearly, communication is a strong and salient factor impacting levels of family satisfaction across time, although perhaps the level of openness in communication is a more salient in determining family satisfaction than is the degree to which conformity is imposed.

Examining the potential moderator effects of time 1 attachment variables on the relationship between time 1 communication variables and time 2 family satisfaction, one moderator effect and a hint of another emerges. Attachment anxiety in relation to mother appears to moderate the relationship between communication with mother at time 1 and family satisfaction at time 2. Based on the current data, a moderate amount of anxiety in relation to mother is associated with a stronger relationship between communication and family satisfaction. In addition, attachment avoidance in relation to father shows a trend toward moderation. The relationship between time 1 parent-adolescent communication with father and family satisfaction
is stronger at lower levels of avoidance than at higher levels of avoidance. This is the same moderator that was found to be a significant predictor of concurrent family satisfaction.

Perhaps the earlier attachment relationship shapes proximal future relationship expectations, and whether those expectations are met or not relates to one’s level of satisfaction with family relationships. In this case, the belief that father will not be supportive and protective might lead the expectation of poor communication. In the event that there is positive communication, this individual may have much higher levels of family satisfaction that would otherwise be expected. This explanation is in line with previous findings that suggest family satisfaction reflects the degree to which relationship expectations are perceived to be met (Caughlin, 2003; Kelley & Burgoon, 1991). An alternative explanation is that those who are more avoidant in their relationship with their father at one point in time have less opportunity to develop or experience positive communication in their relationship with their father and thus perceive less satisfaction with their family as a result. This explanation would be in line with previous research finding communication to mediate the relationship between attachment and relationship satisfaction in romantic partners (Feeney, 1994; Feeney, Nollar, & Callan, 1994). An examination of the data does reveal that parent-adolescent communication with father at time 2 partially mediates the relationship between attachment avoidance in relation to father at time 1 and family satisfaction at time 2. It may be possible that both explanations hold water in a complex model of the relationship between attachment, communication, and family satisfaction. Further research is necessary to shed additional light on the issue.

**Limitations**

There are a number of limitations to be recognized in this study. First, the sample was drawn exclusively from the psychology participant pool at a large southeastern university. Although the age and status (i.e., college student) of the participants is relevant to the study
objectives, utilizing the participant pool may have introduced an unknown bias. For instance, perhaps individuals with troubled (or, as I like to think, extremely healthy) relationships with their parents are overrepresented in undergraduate psychology classes. In addition, the sample was overwhelmingly female (82%).

Although expected and somewhat confirmatory of the theoretical groundings of the study, the moderate to high correlations between variables complicates statistical analysis and interpretation. Plus, the correlational nature of the study limits strong causal interpretations, although the longitudinal data does allow for some propositions about causal relationships. In addition, a high attrition rate, perhaps due to the coincidence of the second data collection occurring the week before and week of spring break, severely limits the sample size for the longitudinal data analyses.

The self-report nature of the data may present another limitation in this study. The survey depended on participants responding to a series of questions about their perceptions, in relation to their parents, of the emotional bonds, communicative behaviors, and degree of satisfaction. Thus, the data may not represent a “true” picture of the family environment and can only be thought to capture the subjective perceptions of individual participants.

**Implications**

**For Theory**

Findings from this study have implications for attachment theory as well as the bioecological perspective. The findings offer additional support of the relevance of attachment during emerging adulthood and the findings that there appears to be distinctions in the attachment relationship to mother compared to the attachment relationship with father. Findings that suggest the nature of the relationship between attachment, communication, and family satisfaction add to the knowledge base regarding attachment during the transition from
adolescence to adulthood. Correlational data suggest that, when it comes to satisfaction and communication, attachment avoidance is more salient than is attachment anxiety. In addition, there appears to be a complex relationship between attachment and communication across time. Future research may help to illuminate the details of this relationship.

As far as the bioecological perspective is concerned, the findings of this study suggest that there may be interesting interplay between intra- and interpersonal aspects of a person’s social and developmental ecology. In this case, the assumed complex relationship between attachment and communication, as well as the unique contributions of each in predicting family satisfaction, suggest that the intrapersonal context and the interpersonal context both play relevant roles in one’s determination of how satisfied they are with their family relationships. Furthermore, understanding the relative contributions of intra- and interpersonal contexts may guide future research and interventions with individuals and/or families.

For Practice

Practitioners who work with college students or older adolescents may perceive the results of this study to highlight the importance of the attachment relationship and communication in determining family satisfaction. Knowing that family satisfaction contributes heavily to overall life satisfaction (e.g., Campbell, Converse, & Rodgers, 1976; Peterson, Peterson, & Skevington, 1986) suggests that college students current patterns of communication and attachment styles in relation to their parents are worth exploring and perhaps adjusting in order to increase family satisfaction. In addition, knowing that attachment relates to different aspects of communication in different ways, practitioners may consider specific aspects of communication to focus on in order to increase family satisfaction and/or overall family functioning.
Directions for Future Research

There are a number of directions for future research related to this study. First, in general, research related to emerging adults as a distinct population of interest is lacking. Future research might focus on emerging adults from various populations (i.e., college students, early career, rural, urban, etc.) to look for similarities and differences within the larger population of emerging adults. More closely related to the current research would be research that examines attachment, communication, and family satisfaction across the transition from adolescence, to emerging adulthood, to adulthood. A longitudinal study from age 16 or 17 to age 30 might provide extremely useful information regarding how attachment, communication, and family satisfaction are related and/or change across time.

Additional research utilizing the difference method to score the P-AASQ may offer information about a potentially more sensitive and versatile measure of parent-adolescent attachment. For example, utilizing this method with a sample of characteristically more maladjusted group of emerging adults (i.e., those who are in treatment or those who are in jail, may offer a more normally distributed sample of attachment style and may lend more power to a study involving attachment. Replication of studies utilizing the P-AASQ previously may also be enriched by using the difference method to score the measure.

Future research examining attachment, communication and satisfaction may benefit from collecting longitudinal data across a larger period of time. The 6 – 8 week time gap utilized in this study may have limited the types of questions that an otherwise longer time gap may be able to accommodate. Specifically, questions related to change across time in each of these variables separately and in combination are interesting questions that future research may help to answer. Utilizing a larger longitudinal sample size may increase the power to find significant moderator effects.
In order to get a broader picture of the family environment and the relationships between attachment, communication, and family functioning, future research may benefit from including the perceptions of numerous family members. Although the current study purports to be “family-related research” as opposed to “family research” (Scabini, Marta, & Lanz, 2006), including additional family members perceptions may offer additional insight into the seemingly complex relationships between the intra- and interpersonal contexts that characterize family relationships.

**Summary**

Overall, this study demonstrates support for the relative contribution of both the intra- and interpersonal contexts in predicting levels of family satisfaction in emerging adults. Attachment and perceived patterns of communication with parents are both significant predictors of levels of family satisfaction and despite the correlation between attachment and communication variables, they uniquely contribute to the prediction of family satisfaction. Communication variables are clearly the stronger predictors in most cases as are relationship variables in relation to mother. In addition, this study offers limited support, but perhaps high impetus to continue to examine the potential moderation effect that attachment has on communication and satisfaction.

There appears to be a differential impact on the attachment relationship depending on whether relationship being considered is that with mother or that with father. The trend that emerged was that attachment avoidance was more salient in relation to mother and attachment anxiety is more salient in relation to father, at least when it comes to family satisfaction. It is also clear that demographic and family status variables have some impact on family satisfaction and perhaps even communication and attachment. However, an exploration of the specific effects of those variables was beyond the scope of this study.
Methodologically, it appears that utilizing the difference method to score the P-AASQ is a potentially viable option. Although there is a potential for a skewed or kurtotic distribution, a transformation appears to hold potential success as a way to reasonably utilize two continuous dimensions of attachment working models (i.e., anxiety and avoidance) to examine relationships between emerging adults and their parents. Clearly, attachment to parents remains a salient aspect of the interpersonal world of the emerging adult. The seemingly complex relationship between attachment and communication may provide a fertile intersection to explore in the service of theory and practice.
APPENDIX A
INFORMED CONSENT

Protocol Title: Correlates in the Emerging Adult-Parent Relationship

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study:

The purpose of this study is to examine specific individual-level and family-level correlates in emerging adults’ relationship with parents.

What you will be asked to do in this study:

You will be asked to answer some demographic questions (gender, age, etc.) as well as a series of questions regarding your relationship with your parent(s). These questions focus on how you perceive your current relationship with your parent(s) (within the last few days/weeks/months) regardless of how things have been in the past. Once you have answered all of the questions, you will be asked if you might be interested in participating in a follow-up survey. If you are not interested in the follow-up survey, you will be asked to simply submit your responses. If you indicate an interest in the follow-up survey, you will be asked to think up and enter a 5 digit code, and then submit your responses. You will be directed to another webpage where you can enter your name, email address, and phone number so a researcher can contact you at a later date. If you have an interest in participating in the follow-up survey, the only information that will be linked to your data will be the 5-digit code that you create. In other words, your name/email/phone will in no way be connected to your responses, so your data will remain completely anonymous.

Time required:

Approximately 35 minutes

Risks and Benefits:

There are no anticipated risks to participating in this study. There may be no benefits to you as a result of participating in this study.

Compensation:

If you qualify for course credit in exchange for your participation, course credit will be awarded to you. Otherwise, there is no compensation for your participation in this study.
Confidentiality:

All information provided in this study will be completely anonymous. Your location or internet address will not be tracked while you are participating in the study, should you complete the study online. No attempts will be made to link your responses to you in any way.

Voluntary participation:

Participation in this study is completely voluntary. There is no penalty for not participating.

Right to withdrawal from the study:

You have the right to discontinue participation in the study at any time, for any reason, without consequence.

Whom to contact if you have questions about the study:

Michael Ghali, M.S., M.A. (principle investigator): ghali@ufl.edu
Or you can contact the UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph: 392-0433.

Agreement:

By checking the box below, you agree that you have read the procedure described above and voluntarily agree to participate in the study. If you do not agree, please select the “Quit” button below and this window in your web browser will be closed, or please inform the researcher who greeted you that you do not wish to continue. If you do agree to participate, please check the box marked “I agree” below, print this page for your records, and select the “Continue” button; or sign the consent form below and wait for further instructions.

I have read the procedure described above. I agree to participate in the procedure and I have received a copy of this description.
APPENDIX B
MEASURES

P-AASQ

**Directions:** Think about your current relationships with your mother and your father, and then read each paragraph below. For each relationship, first provide (under Column A) a rating score from 1 to 7 to indicate how descriptive each paragraph is of your relationship with that parent. A rating of 1 indicates that the paragraph is “Not at all Descriptive”, a rating of 4 would indicate that the paragraph is “Somewhat Descriptive”, and rating of 7 indicates that the paragraph is “ Extremely Descriptive” of your relationship with that parent. Provide individual ratings for each paragraph under Column A. Second, under Column B, check (√) the one paragraph that BEST DESCRIBES your relationship with each parent.

<table>
<thead>
<tr>
<th>Rating scale for Column A</th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Not at all Descriptive</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>2 Somewhat Descriptive</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>3 Extremely Descriptive</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>4</td>
<td>___</td>
<td>___</td>
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<td>5</td>
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<td>6</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>7</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

**I. Relationship with Father**

A. It is easy for me to become emotionally close to my father. I am comfortable depending on him and having him depend on me. I don’t worry about being abandoned by him or having him not accept me ..........................> ___ ___

B. I am comfortable with not having a close relationship with my father. It is very important for me to feel independent from him and self-sufficient, and I prefer not to depend on him or have him depend on me ..........................> ___ ___

C. I want an emotionally close relationship with my father, but I often find that he is reluctant to get as close as I would like. I am uncomfortable being without a close relationship with him, and I sometimes worry that he doesn’t value me as much as I value him ..........................> ___ ___

D. I am uncomfortable getting close to my father. I want an emotionally close relationship with him, but I find it difficult to trust him completely or to depend on him. I worry that I will be hurt if I allow myself to become too close to him ..........................> ___ ___
P-AASQ (continued)

Rating scale for Column A

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td>Somewhat</td>
<td>Extremely</td>
<td>Descriptive</td>
<td>Descriptive</td>
<td>Descriptive</td>
<td></td>
</tr>
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</table>

II. Relationship with Mother

<table>
<thead>
<tr>
<th></th>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>rate each on scale from 1 - 7</td>
<td>check most descriptive</td>
</tr>
</tbody>
</table>

A. It is easy for me to become emotionally close to my mother. I am comfortable depending on her and having her depend on me. I don’t worry about being abandoned by her or having her not accept me ..................................> __________   __________

B. I am comfortable with not having a close relationship with my mother. It is very important for me to feel independent from her and self-sufficient, and I prefer not to depend on her or have her depend on me .........................> __________   __________

C. I want an emotionally close relationship with my mother, but I often find that she is reluctant to get as close as I would like. I am uncomfortable being without a close relationship with her, and I sometimes worry that she doesn’t value me as much as I value her ..................> __________   __________

D. I am uncomfortable getting close to my mother. I want an emotionally close relationship with her, but I find it difficult to trust her completely or to depend on her. I worry that I will be hurt if I allow myself to become too close to her ........................................> __________   __________
Parent-Adolescent Communication scale (PAC) -- Adolescent and Mother Form

Response Choices:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Moderately Disagree</td>
<td>Neither Agree Nor Disagree</td>
<td>Moderately Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

_____ 1. I can discuss my beliefs with my mother without feeling restrained or embarrassed.

_____ 2. Sometimes I have trouble believing everything my mother tells me.

_____ 3. My mother is always a good listener.

_____ 4. I am sometimes afraid to ask my mother for what I want.

_____ 5. My mother has a tendency to say things to me which would be better left unsaid.

_____ 6. My mother can tell how I’m feeling without asking.

_____ 7. I am very satisfied with how my mother and I talk together.

_____ 8. If I were in trouble, I could tell my mother.

_____ 9. I openly show affection to my mother.

_____ 10. When we are having a problem, I often give my mother the silent treatment.

_____ 11. I am careful about what I say to my mother.

_____ 12. When talking to my mother, I have a tendency to say things that would be better left unsaid.

_____ 13. When I ask questions, I get honest answers from my mother.

_____ 14. My mother tries to understand my point of view.

_____ 15. There are topics I avoid discussing with my mother.

_____ 16. I find it easy to discuss problems with my mother.

_____ 17. It is very easy for me to express all my true feelings to my mother.

_____ 18. My mother nags/bothers me.

_____ 19. My mother insults me when she is angry with me.

_____ 20. I don’t think I can tell my mother how I really feel about some things.
Revised Family Communication Patterns Instrument

Response Choices

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>Mostly Disagree</td>
<td>Slightly Disagree</td>
<td>Neither Agree</td>
<td>Slightly Agree</td>
<td>Mostly Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

**Conversation Orientation**

1. In our family we often talk about topics like politics and religion where some persons disagree with others.
2. My parents often say something like “Every member of the family should have some say in family decisions”.
3. My parents often ask my opinion when the family is talking about something.
4. My parents encourage me to challenge their ideas and beliefs.
5. My parents often say something like “You should always look at both sides of an argument”.
6. I usually tell my parents what I am thinking about things.
7. I can tell my parents almost anything.
8. In our family we often talk about our feelings and emotions.
9. My parents and I often have long, relaxed conversations about nothing in particular.
10. I really enjoy talking with my parents, even when we disagree.
11. My parents encourage me to express my feelings.
12. My parents tend to be very open about their emotions.
13. We often talk as a family about things we have done during the day.
14. In our family, we often talk about our plans and hopes for the future.
15. My parents like to hear my opinion, even when I don’t agree with them.

**Conformity Orientation**

1. When anything really important is involved, my parents expect me to obey without question.
2. In our home, my parents usually have the last word.
3. My parents feel that it is important to be the boss.
4. My parents sometimes become irritated with my views if they are different from theirs.
5. If my parents don’t approve of it, they don’t want to know about it.
6. When I am at home, I am expected to obey my parents’ rules.
7. My parents often say things like “You’ll know better when you grow up.”
8. My parents often say things like “My ideas are right and you should not question them.”
9. My parents often say things like “A child should not argue with adults.”
10. My parents often say things like “There are some things that just shouldn’t be talked about.”
11. My parents often say things like “You should give in on arguments rather than risk making people mad.”
Family Satisfaction Scale (FSS)

<table>
<thead>
<tr>
<th>Response Choices</th>
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</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Dissatisfied</td>
</tr>
</tbody>
</table>

How satisfied are you:

1. With how close you feel to the rest of your family?
2. With your ability to say what you want in your family?
3. With your family’s ability to try new things?
4. With how often parents make decisions in your family?
5. With how much mother and father argue with each other?
6. With how fair the criticism is in your family?
7. With the amount of time you spend with your family?
8. With the way you talk together to solve family problems?
9. With your freedom to be alone when you want to?
10. With how strictly you stay with who does what chores in your family?
11. With your family’s acceptance of your friends?
12. With how clear it is what your family expects of you?
13. With how often you make decisions as a family, rather than individually?
14. With the number of fun things your family does together?
Adolescent Family Life Satisfaction Index

<table>
<thead>
<tr>
<th>Response Choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

I am satisfied with

1. How much my parent(s) approve of me and the things I do.

2. The amount of freedom my parent(s) give me to make my own choices.

3. The ways my parent(s) want me to think and act.

4. The amount of influence my parent(s) have over my actions.

5. The ways my parent(s) try to control my actions.

6. My parents’ relationship with each other.

7. My over-all relationship with my parent(s).

Perceived Stress Scale (PSS) – short form

<table>
<thead>
<tr>
<th>Response Choices</th>
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</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>Never</td>
</tr>
</tbody>
</table>

1. In the last month, how often have you felt that you were unable to control the important things in your life?

2. In the last month, how often have you felt confident about your ability to handle your personal problems?

3. In the last month, how often have you felt that things were going your way?

4. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Michael Ghali was born in Ft. Thomas, Kentucky. He graduated with a bachelor’s degree in psychology from the University of Missouri-Columbia. After meeting the love of his life, Michael moved to Colorado with Christine, where Michael earned a Master of Arts degree in community counseling from the University of Northern Colorado. He currently lives in Gainesville, Florida and graduated with his Ph.D. in Counseling Psychology in August 2009. Michael and Christine married in 2001, and they have two beautiful children, Jace and Kaia. Michael intends to become licensed as a psychologist, practice therapeutic work with older adolescents and college students, and continue to nurture his family.