

VALUE DEVELOPMENT IN EMERGING ADULTHOOD:

THE INFLUENCE OF FAMILY

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The purpose of this study was to better understand value development in an emerging adult, college student population, and to further define, identify and clarify family characteristics that influence values. Theories have sought to examine the developmental influences in emerging adulthood, but little research exists examining the role of the family, particularly in regards to value development. The current study reviewed the literature on emerging adulthood, values, and self-determination theory with attention to family influence. Questions addressed in this study included: 1) are perceived parent values predictors of emerging adult values, 2) will the quality of communication between parents and emerging adults and the presence of an emotionally supportive relationship with both mother and father moderate the relationship between the perception of parent values and emerging adult values, and 3) does the family environment influence the types of values emerging adults perceive to be important to their parents? For this purpose, 200 college students completed 5 different self-report questionnaires measuring the constructs of values, perceived parent values, family environment variables, family communication variables, and quality of relationship with both father and mother. Parents of college students completed a self-report questionnaire measuring their socialization values for their children and a questionnaire measuring family communication; however, the small number of parent responses prevented the data from being used in statistical tests. Multiple regression analyses indicated that perceived parent values predicted emerging adult values. Moderation analyses showed that family communication and the quality of the relationship with father and mother did not strengthen the relationship between perceived parent values and emerging adult values. Lastly, a warm family environment and family activities were

significantly related to how important emerging adults' perceived intrinsic values to be to both their father and mother. Family structure was significantly positively correlated the importance emerging adults' perceived their fathers to place on extrinsic values, but not their mothers. Implications for the findings of the current study will be discussed, as well as, limitations and future research recommendations.

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## CHAPTER I

### INTRODUCTION

The term “emerging adults” has been used by developmental researchers in the 21<sup>st</sup> century to describe individuals who have exited adolescence but have not fully emerged into adulthood as defined by the dominant culture (Arnett, 2000). Many of these emerging adults delay firm career or relationship commitments in order to explore many different options before choosing one that best fits with their goals, and college is a typical setting for this identity exploration. Emerging adults entering college have a unique opportunity to shape their identity and establish a value system (Hauser & Greene, 1991). Value systems are important as they are believed to guide decision-making and behaviors (Schwartz, 1992). In particular, values and their expression may contribute to the accomplishment of particular developmental tasks in emerging adulthood, specifically identity formation and the establishment of meaningful relationships (Arnett, 2006; Schwartz, 2010).

With increased autonomy, students have an opportunity for growth as well as a vulnerability to risk, and values may be pivotal in that process. This is a time when emerging adults have the freedom to note value discrepancies between the family system and the societal system, and make choices concerning values with less parental monitoring. Parents may experience some apprehension as young adults go off to college, wondering if the values instilled at home will continue to guide and direct their child.

However, when Ellen Maurer, associate director of Ball State University Counseling Center, contacted students for their opinion on communication with parents, she was surprised by how many students responded and what they were saying. Within the first hour of her email, she received 600 responses from students eager to share how communication with their parents impacted their adjustment to college, decision making and values. “Discussion of values and

decision-making resulted in similar responses from parents and students. ‘Students said parents think they don't listen, but they make decisions based on what parents have taught them,’ Maurer said. ‘Parents said their students tend to do the right things because of the values they instilled’” (Barker, 2004).

Although the value system young adults adopt may be a mixture of parent values, peer values, and cultural values, the relationship between parents and young adults remains influential (Simpson, 2001; Steinberg & Sheffield Morris, 2001). Research does suggest that most emerging adults, especially college students, are still connected with their families (Aquilino, 1997). However, empirical research concerning the influence of family on value development in emerging adulthood is not as abundant as it is in adolescence (Aquilino, 2006). While the family environment may enhance value transmission in adolescence, it may not be as salient for value development in emerging adulthood if the individual lives outside of the home. How then do parents still continue to connect and guide their emerging adult?

Technological advances that increase the convenience of communication may be one way in which parents can maintain contact with their emerging adult. Many parents and college students report frequent communication through cell phone and internet use. This “electronic tether” from parent to emerging adult (Hofer, Souder, Kennedy, Fullman, & Hurd, 2009) may serve as a vehicle of value transmission in emerging adults because it provides a way for parents and emerging adults to communicate about important life events and possible values that can guide decision making.

The goal of this study was to better understand family influence on value development in emerging adulthood. In particular, the literature regarding emerging adulthood, values, self-determination theory, and family variables was reviewed to provide a picture of what is known concerning value development in emerging adulthood, as well as, questions that still need to be

addressed. Multiple regression and moderation analyses were utilized to better understand how parent values impact emerging adult values, and the role of potential family variables such as environment, activities, structure, communication and quality of relationships was examined.



## CHAPTER II

### LITERATURE REVIEW

#### Emerging Adulthood

Economic, social and educational changes in America over the past 50 years have led developmental researchers to define a new developmental period between adolescence and adulthood. Increases in industrialization, the importance of continuing education for financial success, and delayed times of marriage (Johnson & Dye, 2005), are just a few examples of the changes that have taken place in westernized societies that have created subsequent changes in the culture, distinguishing individuals who have moved beyond their adolescent years but would not typically be characterized as adults. This developmental period has been labeled as emerging adulthood and is used to describe a developmental period potentially ranging from age 18 to 25 that is distinct from adolescence or later stages of young adulthood (Arnett, 2000).

Findings from demographic research lend validity to the creation of a developmental period between adolescence and young adulthood by showing that individuals between the ages of 18-25 now are characteristically different from individuals who were 18-25 fifty years ago (Arnett, 2000). First, the median age for marriage and first childbirth has increased in the United States and other industrialized countries since the 1960s. However, variance within the population has also increased, meaning that some individuals still get married and have children as early as they did in the 1960s but overall, the age at which these developmental tasks are reached is increasing. Second, current emerging adults are participating in higher education more than their counterparts fifty years ago. The increase in women's participation significantly contributed to this finding. Third, residential moves, or changes in geographic locations, have increased in the past 50 years, suggesting transiency versus stability as a state that characterizes emerging adulthood.

Overall, Arnett (2006) states:

The age period from about 18 through the mid-20's has changed from being a time of settling down into adult roles of marriage, parenthood, long-term work, and a long-term residence to being a time that is exceptionally unsettled, a period of exploration and instability, as young people try out various possible futures in love and work before making enduring commitments. (p.7)

Traditional developmental theories have focused on childhood and adolescence as the most salient point in life for psychological and physical development, implying that no additional gains are made after these early years, but rather maintained throughout adulthood and then lost in late adulthood. More recent developmental theorists have suggested a lifespan approach to development: the idea that development and growth occurs throughout one's life. Research and theory seek to understand individuals at all points in the lifespan in order to fully explain human development (Arnett, 2000; Rutter & Sroufe, 2000). Following this suggestion, many developmental theorists have moved beyond stage-like development and written about developmental tasks or critical periods in which "individuals gain particular skills at different ages and these skills are then put to the test in subsequent developmental challenges" (Burt & Masten, 2010, p. 6). One's family and the society in which one lives creates expectations of what the challenges are and when those challenges need to be met. It is important to note that "emerging adulthood" and its characteristics are not experienced by all individuals in the age group from 18-25 years old; context and culture may present different developmental tasks to achieve or these tasks could have been achieved before this period.

Psychologists have proposed sets of developmental tasks for different age periods (Masten & Coatsworth, 1998). Distinguishing emerging adulthood from other developmental periods has important implications for developmental theory, intervention, and policy (Burt & Masten, 2010). It also has importance to psychological research. Assumptions about emerging adulthood cannot be made based on adolescent or young adulthood models of development

because research findings show a difference in developmental tasks between these age periods that would affect and are affected by contextual factors such as family of origin, school, career, and relationships.

Certain developmental tasks distinguish emerging adulthood from young adulthood. Developmental tasks typically associated with young adulthood include: accepting responsibility for oneself, making independent decisions, and becoming financially independent (Cronce & Corbin, 2010). Emerging adults are often characterized as moving towards these tasks but not yet accomplishing them.

Emerging adulthood can also be distinguished from adolescence. Developmental tasks in adolescence, according to Burt & Masten (2010), include academic achievement, transitioning to secondary schooling, forming close relationships, abiding by societal rules, and forming a cohesive sense of self. Developmental tasks of emerging adulthood include maintaining competence in adolescent tasks but with higher expectations for the level of achievement of these tasks. In particular, the adolescent task of creating relationships outside of the home is expected to lead to the formation of positive, intimate relationships in emerging adulthood, with some even becoming parents during this time. In addition, the adolescent task of developing rule-abiding behavior to function successfully in society leads to the expectation of civic engagement in emerging adulthood. It is important to note that although these tasks center on an individual's engagement with society and others, the internal tasks of autonomy, intimacy and individuation, and solidifying an identity, are inextricably linked to these more external tasks. Therefore, values development, a part of identity development, is seen as a key developmental task of emerging adulthood as well.

Further, Arnett (2006) describes five main features that define emerging adulthood and distinguish it from adolescence and young adulthood. The features are as follows: instability,

self-focus, feeling in-between, increased possibilities, and self-exploration (Arnett, 2004). While the term “instability” may sound pejorative, it actually speaks to the exploratory nature of this period in many areas, including residence locations, career, school, and relationships. During this developmental period there are many opportunities for exploratory activities before stabilizing a developmental path, including participation in higher education. These activities help individuals identify what they are looking for in a career, relationships, and life goals.

Emerging adults are considered self-focused because there is a relative absence of customary obligations to others or society. Unlike adolescents, they have primary responsibility for decisions concerning daily activities (Arnett, 2001) and other decisions that may be guided by their own values and beliefs. This focus on self allows emerging adults to pursue activities that may help them define life goals, as well as, give them an opportunity to pursue activities that will lead to being self-sufficient. The term “self-focused” is not synonymous with “self-centered.” Arnett (2006) has conducted qualitative research comparing adolescents and emerging adults and found that emerging adults are less ego-centric, more able to entertain others’ points of view, and more considerate of others’ feelings than adolescents.

Research shows that emerging adults see themselves as more than adolescents but not quite adults. Rather they feel they are in-between these stages (Arnett, 2001). Individuals between the ages of 18-25 have reported that reaching adulthood is not necessarily linked to events such as obtaining an education or getting married, rather they report 3 top criteria for reaching adulthood: accepting responsibility for self, making independent decisions, and becoming financially independent (Cronce & Corbin, 2010).

In a national survey, 96% of individuals between the ages of 18-24 reported they believed they would get to where they wanted to be in life (Hornblower, 1997 as cited in Arnett, 2006). Emerging adults hold high hopes for their future, in work and in relationships perhaps because

life goals have not been tested against the reality of experience; this is why this developmental period is labeled as the age of possibility. Emerging adulthood is most likely the first opportunity for individuals to leave their families of origin; and for individuals coming from dysfunctional homes this may be a very hopeful and freeing experience. Even for those who come from more positive home environments, the opportunity is present to create their own lives, make more independent decisions, and live in a way congruent with their values.

According to Erikson (1980), two elements comprise identity exploration: integrating elements of the person's culture and context into the definition of self but also distinguishing the self as unique. It is seeking to create balance between the values of mainstream society so that one can live and work in this society but also achieving a sense of individuality. Identity exploration is thought to take place when an individual's present identity does not support or satisfy the individual, given new demands or changes in the environment, such as entering college, starting a new relationship, or experiencing discrimination (Schwartz & Pantin, 2010).

While traditionally Erikson described identity formation as a task achieved in adolescence, current research suggests that identity issues are particularly salient for individuals from 18 to mid-20's (Arnett, 2006; Labouvie-Vief, 2006; Schwartz & Pantin, 2006). Research suggests that the majority of identity exploration occurs during normative life transitions, such as beginning a job, leaving home, or entering college, and given the transitions that occur during emerging adulthood, this period is primed for identity exploration (Kroger, 2000). Identity exploration in emerging adulthood encompasses the investigation of both professional and personal roles. Concerning professional roles, emerging adults are faced with the choice to begin a career or attend college. Research suggests that of those students who receive a high school diploma or GED certificate, 68.6% enter college (Cronce & Corbin, 2010). However, students often take breaks while attaining their college degree to work or for some other reason. Other

students merge their studies with work. The U.S. Department of Labor found that 42% of college students also worked (U.S. Department of Labor, Bureau of Labor Statistics, 2010), some of whom enrolled as part-time students. As a result, it may take longer for these individuals to obtain a degree to participate in a full-time job and become financially independent. Even beyond the decision between career and college, emerging adults are trying to find out what they like to do and what they are good at. The early 20's provide an opportunity for individuals to explore different types of jobs or different fields of study through varied college coursework that may allow for a better fit between individual characteristics and the world of work.

Concerning personal roles, Schwartz and Pantin (2006) state that identity includes values, beliefs, and goals that one presents to the world. Arnett (2006) states, "In forming a worldview that addresses questions about values and religious beliefs, emerging adults also address identity issues in these areas, because deciding on their values and beliefs also means deciding who they are and how their worldview is similar to and different from the one held by their parents" (p. 8). A longitudinal study of 109 college students, compared reported values upon first entering college and then again at graduation. Results showed some changes in individual value systems, suggesting that values are still salient and developing in emerging adults (Sheldon, 2004). Overall, research suggests that identity exploration continues past adolescence into emerging adulthood, particularly in regards to relationships, career, and value development.

## Values

### *Definition and roles of values*

Given the importance of values for emerging adults, examining the definition of values and the role they are thought to play in decision-making and behavior will give a clearer picture of the construct and its impact on emerging adults. Although values have been studied for some time, the definition of values and what values are important has been controversial (Rounds &

Armstrong, 2005). Walker (2010) found that the definition of values varies based on the theoretical foundation one uses. This lack of unity in the definition has perhaps led to limited knowledge of values and their effects in people's lives. The literature also points to some differences in values measures as well, such as what types of values are important and how many values should be considered (see Appendix A for these values lists). This raises the question of which values are most important or most universal (Schwartz, 1992).

However, there are value models that have become prominent in the literature, shaping the way values are defined. Eduard Spranger, a philosopher, was one of the first individuals to write about the development of values, and he identified six basic values: theoretical, aesthetic, social, economic, political, and religious (Rounds & Armstrong, 2005). Gordon Allport and Philip Vernon were the first to measure values in 1931 and developed the Study of Values, founded upon Spranger's six basic values. A major contributor to the definition and measurement of values is Milton Rokeach. He defined values as "beliefs with some means or end of action that are judged to be desirable or undesirable," enduring but somewhat less stable than personality traits (Round & Armstrong, 2005, p. 308). Rokeach identified two types of values: instrumental and terminal. His 18 instrumental values include types of conduct or behavior, such as obedience, responsibility, and honesty. The 18 terminal values deal with end states such as true friendship, family security, and the comfortable life. His list of values was developed based on the criteria that the values included be intrinsically interesting, cross-culturally relevant, and not susceptible to social desirability bias; he then tested his values list on several different populations differing in age, race, and gender (Rokeach, 1968). Rokeach's work also differentiated between values and value systems. Rokeach defines value systems as a hierarchical list of the individual's values based on importance that give a framework for decision-making when values conflict.

Shalom Schwartz is credited with having the most active research program concerning values (Rounds & Armstrong, 2005; Walker, 2010). Schwartz's model defines values as "desirable, transsituational goals, varying in importance, that serve as guiding principles in people's lives" (Schwartz, 1992, p. 2). Based on three theoretical universal requirements for human existence, biological needs, requirements for harmonious social interactions, and group survival or functioning, he identified 10 value types (Seligman, Olson, & Zanna, 1996). These values are arranged in a circular order in which the values closest to each other conflict the least, and values situated on opposite sides of the circle conflict the most. One example of this is achievement (a value type that promotes ambition) which is next to and complementary with power (a value that promotes the importance of social status and control over others or resources) but is arranged on the opposite side of the circle and usually conflicting with benevolence (a value type that promotes in-group harmony). Schwartz suggests that the more importance an individual places on values closest to each other on the circle, the less struggle individuals will experience when acting on their values. A benefit of his work appears to be the cross-cultural universality of these 10 value types; the values circumplex has been empirically tested by extensive research in over 40 countries (Seligman, Olson, & Zanna, 1996). His values list is very broad in nature and could be expressed in an individual in different ways based on cultural context or developmental stage in life. For example, the value of achievement may be expressed as striving for high grades for a student or working diligently to attain a raise at work for an adult.

Although each value theory defines the construct somewhat differently, Schwartz (2010) delineated six important features of values included in the most current theories. The six features are as follows: "1) values are beliefs inextricably linked to affect, 2) are desirable goals that motivate action, 3) transcend specific actions and situations, they serve as standards [guiding] the



selection or evaluation of actions, policies, events, and people, including one's self, 4) are ordered by importance relative to one another, 5) form a relatively stable ordered system of priorities, and 6) the relative importance of multiple values guides any action or attitude" (p. 223).

Because values are linked to affect, when a personal value is threatened, people will often respond emotionally. Also, when a value is activated, or becomes salient to the person, affect will also be activated and can serve to enhance motivation to act in congruence with one's value. Values cannot be looked at in individual isolation because it is the relative importance of one set of values over another that serves to help individuals make decisions about their behaviors. When making a decision to act, an individual will examine his or her value priorities and may sometimes choose a course of action that is congruent with a more important value but dissonant from a lesser important value. For example, a person that values achievement may not pursue a competitive job against a close relative because he or she places greater importance on the value of harmony in the individual's value hierarchy. After reviewing the literature, Walker (2010) concluded that values can be defined as: 1) a set of enduring beliefs, (2) that serves to guide and evaluate one's behaviors, (3) and that reaches beyond a specific situation or context.

#### *Measuring values using self-determination theory*

One theory that addresses values and provides a framework for their measurement is self-determination theory (SDT) as posited by Edward Deci and Richard Ryan. Intrinsic and extrinsic values are central to this theory (Ryan & Deci, 2000). An intrinsic value is congruent with basic psychological needs and contributes to personal growth; these values include self-acceptance, relationships, and contribution to society. Extrinsic values focus on the attainment of praise or admiration from external sources and are not related to personal growth; these values include wealth, recognition by society, and one's desire to look attractive to others (Kasser &

Ryan, 1993, 1996). These values are a part of the SDT theory of motivation. Intrinsic motivation is seen when an individual engages in a behavior because of a personal interest or desire to do that behavior. Extrinsic motivation is seen when an individual engages in an activity because it is required. When a task that is extrinsically motivated becomes more internalized (the person takes on that task as salient and beneficial to the self), the person experiences greater well-being and exhibits better performance (Deci & Ryan, 2000; Deci, Sheinman, Schwartz, & Ryan, 1981). Emphasizing intrinsic over extrinsic values also appears to be important for psychological well-being. Research suggests that placing more importance on intrinsic values over extrinsic values is significantly related to positive well-being, life satisfaction, and psychological adjustment in adolescents and college students (Kasser & Ryan, 1993, 1996; Schmuck, Kasser, & Ryan, 2000; Sheldon & Kasser, 1995).

More broadly, SDT is a meta-theory of development in which people are viewed as active organisms moving toward psychological growth and greater development. Three basic psychological needs thought to be universal among all people are autonomy, relatedness, and competency (Ryan & Deci, 2000). These must be met in order to maintain healthy functioning and achieve developmental growth. SDT indicates that people naturally internalize the values within their social context. Within this natural process, extrinsically motivated behavior can become more intrinsically valued as the need of relatedness, autonomy, and competence is met from the surrounding environment.

Within self-determination theory research, Tim Kasser and Richard Ryan, have developed the Aspirations Index (AI). “The AI assesses people's intrinsic and extrinsic life goals or aspirations. That is, it measures the degree to which people value seven broad goal contents--wealth, fame, image, personal growth, relationships, community contribution, and health” (website - <http://www.psych.rochester.edu/SDT/measures/index.html>). The seven broad goal

contents assessed in the Aspirations Index significantly load onto Schwartz's 10 value types in a factor analysis, therefore, the creators of the scale indicate that the AI can also be used as a measure of values (Kasser, 2002; Kasser & Ryan, 1996). One strength of the AI is that it allows the researcher to measure the amount of importance for each value. This enables the researcher to understand how much more important one value is to an individual than another, rather than just gaining a rank order of values.

### *Values in emerging adults*

Emerging adults are seeking to establish a hierarchical system of values that is central to their self-concept and that will aid them in establishing priorities and standards of action that transcend situations or specific contexts (Schwartz, 2010). Therefore, establishing a hierarchical set of values is an important component of emerging adult identity exploration.

One theory that may explain how emerging adults come to structure a value hierarchy is the organismic valuing process (OVP; Rogers, 1964). OVP is the innate human ability in which people use current feelings and past experiences to help make a decision. Some research suggests that as people age, they move towards more intrinsic values. This idea was tested with a college student population in a longitudinal study. Sheldon (2004) assessed 109 college students' values (Male = 18; Female = 91) at the beginning of their college careers and at graduation using the Aspirations Index importance scale. Findings supported the idea that people embrace more intrinsic values as they age. However, only intrinsic values regarding relationships increased. The shift towards more intrinsic values was best explained by a decrease in extrinsic values. This finding is supported by developmental theories of emerging adulthood. In particular, it is thought that emerging adults focus more on embracing intimacy and relationships and away from ego-centric, self-identity focus. Given this research, it may be that

emerging adults begin to place less importance on extrinsic values and more importance on intrinsic values as they age.

### Family Influences on Value Development

Over the past 25 years, research has focused on the influence of the family in adolescent development and three broad areas have been identified as important in the literature: family relationships, adaptive or dysfunctional family functioning, and parents as socialization agents. These three areas may all be important influences in regard to the transmission of values. For example, Grusec and Goodnow (1994) postulate that parent's knowledge of their child, the parent-child relationship, and parent's socialization goals are important in the transmission of values. However, little is known about whether value transmission continues in emerging adulthood and what factors influence it (Aquilino, 2006; Tromsdorff, 2006). In particular, Walker (2010) found that parental values remained important to college students but the role of family variables was unclear. This section will explore how values are transmitted from parent to child, what factors influence transmission in adolescence, and finally, what is known about the influence of the family on value development in emerging adults.

#### *Family value transmission theory*

Value transmission is seen as the process by which parents' communicate their values, both verbally and nonverbally, to their children, and in turn the child adopts these values in some form. Schlompflug (2001) describes value transmission as neither fully present nor fully absent within a family, but believes value transmission is partial. This allows for growth and development within a culture as value systems change across generations. Therefore, "successful" value transmission is not full acceptance of all parent values; however, in order for transmission to take place, the presence of parent values must be made known to the child in some way. Grusec and Kuczynski (1997) define value socialization as "children's autonomous

acceptance of parental values and standards and their spontaneous application of these values and standards in the absence of surveillance.” The value socialization process is described as ongoing and adaptive as adolescents learn to apply their values systems across different situations. It takes into account other influences such as peers and culture that may aid the adolescent in constructing a value system in absence of parental monitoring.

Early value theories argued that the child is simply an agent that is acted upon by the parent and given a value message. However, current developmental and social theorists are proponents of a more constructivist view of value transmission, called bidirectionality (Grusec & Kuczynski, 1997). Bidirectionality suggests that the parent and child are both active agents and influence one another in the value transmission process. However, it is theorized that parents are responsible for the management of socialization, such as dealing with conflicting value messages from the culture and creating a family environment that fosters similar values between parent and child, which is described as congruence in the literature (Walker, 2010). Recent research on transmission of values suggests that the level of congruence between parent and adolescent/young adults is a function of the type of value being transmitted. For example, transmission was highest for values of moral or community issues, such as conformity, tradition, benevolence, while values concerning personal issues such as fame, achievement, and self-direction did not show as much congruence (Albert & Tromsdorff, 2003; Knafo & Schwartz, 2009; Schonpflug, 2001).

#### *Value transmission in adolescents*

Joan Grusec and Jacqueline Goodnow (1994) proposed a bidirectional model of value acquisition, or how adolescents acquire values within the family environment. An assumption of this model is that all parent values are “positive” or “good” and does not address potential “negative” values parents may transmit. However, even with this limitation, Grusec and

Goodnow's model is a highly utilized theoretical model that has been empirically tested in values literature and has gained support. Grusec and Goodnow's model describes a 2-step process of perception and acceptance by the adolescent. First, the adolescent perceives what values are important to the parent, and second, either accepts or rejects these values. Parents are also thought to influence value transmission via parenting style, relationships, or the family environment. Given the role the adolescent and parents play, it is assumed that value transmission is influenced by both adolescent and parent characteristics. Historically, only modest congruence between children's and parents' actual values was found (Whitbeck & Gecas, 1988 for review). This is believed to be due to the fact that children may not accurately perceive parental values, and it is theorized that there will be greater similarity between children's perceptions of their parents' values and their own values (called acceptance), than between children's perceptions of their parents' values and their parents' actual values (called accuracy). Therefore, identifying variables within the family that increase the likelihood of accurate perception by the adolescent and increase their acceptance is important to understand the process of value transmission. However, value congruence between actual parent values versus perceived parent values and emerging adult values has not been tested.

*Family variables affecting value transmission in childhood and adolescence*

Different variables within the family are thought to affect the accuracy and acceptance of children's perception of parental values (Grusec & Goodnow, 1994; Knafo & Schwartz, 2009). Knafo and Schwartz (2009) found that family demographics such as educational attainment, membership in social organizations and religion can lead to higher accuracy and perception because it reinforces the message of the values and parent's legitimacy. Also, Smetana (2000) suggested adolescents are more likely to accept values when they see their parents as having legitimacy or authority in the area. Social characteristics that distinguish their families from

others can also help increase accuracy. Relationship and family functioning variables have received even more attention in the literature as contributing to accurate perception and acceptance and will be reviewed in the following section.

Value transmission within families is greater when support and communication are high (Knafo & Schwartz, 2004). Specific parenting styles and practices make it easier for children to correctly identify the values important to their parents and may also lead to greater acceptance of these values. For children and adolescents, the authoritative style of parenting is believed to be most effective for the transmission and internalization of values (Grusec, Goodnow, & Kuczynski, 2000). Baumrind described authoritative parenting (1967) as “warm and involved, but firm and consistent in establishing and enforcing guidelines, limits, and developmentally appropriate expectations” (Steinberg, 2001, p. 10). Grusec, Goodnow, and Kuczynski (2000) believe the qualities of warmth, consistency, and responsiveness are key elements that make the authoritative parenting style conducive to the transmission of values. Relatedness, or closeness, is seen as key to the process of internalizing values from the environment (Niemi et al., 2006; Ryan & Deci, 2000). When the parent is more responsive to the needs of the child, the child will be more likely to comply with parental demands and rules. Parents’ responsiveness may also strengthen their image as a relevant role model to the adolescent, and therefore, the adolescent will act in ways similar to the parent. Schonpflug (2001) suggests that empathic parenting, the presence of positive emotional interactions between parents and children, contributes to value transmission, whereas rigid, authoritarian parenting style decreases probability for value transmission because it creates distance between parent and child. It may be that structure or consistency in rule enforcement is not negative but may need to be coupled with emotional warmth and responsiveness to promote value transmission.

How the family functions on a day-to-day basis communicates values both verbally and nonverbally and is implicated in value transmission. When parents foster an environment where their most important values are communicated, adolescents have a greater chance of accurately perceiving and understanding the family value system and incorporating it into their own (Schwartz, 2010). Based on findings in the empirical literature, family characteristics that encourage value transmission in adolescents appear to be communication in the family, family activities that convey values, and the importance of the value to the parents (Day, Borkowski, Dietmeyer, Howsepian, & Saenz, 1992; Piquart & Silbereisen, 2004).

*Empirical evidence investigating family variables and values*

The following studies were reviewed by Walker (2010) in an effort to understand the influence of family variables on value transmission. These studies provide information about how family variables may influence children and adolescents, ages 9-18, who although not reported, appeared to be living at home. Given the difference in age and living situation of emerging adults compared to participants in these studies, it is not clear about the impact of these variables on emerging adults. Whitbeck and Gecas (1988) hypothesized that parent support and discipline via open discussion would increase value congruence, and that more authoritarian discipline would decrease congruence. Participants included 82 mostly Caucasian middle-class families, with children ages 9-11 or 13-15. Like others, the researchers found that congruence between parents' and children's actual values was low (median correlation .05 for father and .14 for mother). When children's perceptions of parents' socialization values (not parents' actual values) were considered, relationships were higher (median correlation .46 for father and .45 for mother). It should be noted that parents' personal values were highly correlated with their socialization values (median correlation .72 for father and .75 for mother). Congruence was



measured using absolute differences of rankings of values with a condensed form of Rokeach's Value Survey.

This study also investigated family variables that contributed to congruence. Parental behaviors such as support and discussion about values were predictive of congruence, most clearly for fathers and daughters. This implies that family support and open discussion, or communication, contribute to accurate perception and to the child's acceptance of perceived parental values perhaps most for fathers and daughters. This supports the importance of authoritative parenting, but there was little support for the negative impact of authoritarian parenting.

One limitation of this study is that the median test-retest reliability of the children's values at a two-week posttest was low at .31, suggesting that the children had difficulty comprehending the meaning of the values or possible error in the measure itself. In addition, the measures of family characteristics were very short, and there is no information about the correlation of the different family characteristics. Family variables were not studied in relation to the accuracy of children's understanding of parents' actual values, but the authors point out that neither party is very accurate in describing the values of the other.

The following studies are guided by Grusec and Goodnow's 2-step process of value transmission, and investigate specific family variables that increase accurate perception of parental values. Two studies by Knafo and Schwartz (2003, 2004) investigated family variables that may contribute to accuracy, hypothesizing that accuracy of perception is a "basic condition" for value transmission. Knafo and Schwartz (2003) hypothesized that communication about values, the extent to which both parents agreed about socialization values, and the consistency of parents' verbal messages and behavior would be associated with greater accuracy in perceiving parental values. They also hypothesized that parental warmth/responsiveness would increase

communication and adolescents' motivation to attend to parent values, and therefore these variables would be associated with accuracy.

Participants included 547 Israeli adolescents (ages 16-18) and their parents, from a range of socioeconomic statuses. Using their own value survey based on Schwartz' values, adolescents and parents answered questions about their own values, and adolescents rated how their parents would want them to respond. Within dyad correlations assessed congruence, and showed wide variation (.99 to -.75 for fathers; .96 to -.64 for mothers) showing the discrepancy between adolescent and actual parent values. Value discussion was measured by asking adolescents about frequency of discussions of the 10 values with their parents, and conflict expressed with their parents concerning values. Parenting characteristics of warmth and responsiveness were ascertained by a four self-report items.

Knafo and Schwartz (2003) hypothesized that the extent that both parents agreed about socialization values and the consistency of parents' verbal messages and behavior would be associated with greater accuracy in perceiving parental values. All of these variables were significant predictors of accuracy ( $R^2 = .22$ ), although the importance of variables varied in the different parent-adolescent dyads. In particular, warmth, responsiveness and authoritative parenting were more predictive of accuracy in mother-daughter dyads. Another interesting aspect of communication measured in this study was parental word-deed inconsistency. Word-deed inconsistency in value messages was negatively related to accurate perception, except in father-son dyads. This finding implicates the importance of not only verbal communication but also parental activities that convey values to increase accurate perception.

They also hypothesized that parental warmth/responsiveness would increase communication and adolescents' motivation to attend to parent values, whereas conflict about values would decrease motivation. Findings supported the relationship of parental warmth and

responsiveness with accuracy, particularly for fathers and sons ( $\beta = .20$ ,  $\beta = .61$  for father-son dyad).

Knafo and Schwartz (2004) further studied the validity of the 2-step process by measuring both perception and acceptance of values by adolescents. Specifically, they looked at adolescents' exploration and commitment to aspects of their identity (Marcia, 1966) and the congruence of adolescent values, parent socialization values, and adolescent perceptions of what their parents would want them to value. They hypothesized that exploration would be related to accuracy, and commitment would be related to acceptance of parent values. Participants consisted of 267 adolescents, ages 16-18, who took a revised form of the Portrait Values Questionnaire, first asking participants to rate the importance of the portrait personally and then what their parents would like for them to rate it as. Parents completed the questionnaire in light of which values they believed were important for their adolescent. Accuracy is defined as the adolescent's correct perception of parental values and is measured by correlating parents' rating of their values and adolescents' rating of parents' values. Acceptance is defined as the adolescent's choice to accept or reject perceived parental values and is measured by correlating adolescents' perception of parent values and their own report of values. Other self-report questions on identity formation and identification with parents were also asked.

The study did find support for Grusec and Goodnow's 2-step process of value acquisition in that accuracy of perception and acceptance significantly added to the relationship between parent and child values, or value congruence (27% for mothers, 36% for fathers). Findings indicated that adolescents in the exploration stages of identity formation perceived their parents' values more accurately, and acceptance of parental values was highest in the commitment statuses of identity formation. Again, congruence between adolescent values and actual parent

values (or parents' report of their socialization values) was low and was not significantly related to identity formation. In actual similarity of values, it appears other factors are involved.

### Family Influences on Value Development in Emerging Adulthood

#### *Family variables affecting value transmission in emerging adults*

Working from the hypothesis that family does continue to influence development in emerging adults, more research is needed on parent-child relationships and how these relationships are affected by the changes that characterize emerging adults (i.e., transition to college; Trommsdorff, 2006). Maccoby (1999) suggested that parent's transition to the empty nest period of life and young adult's transition to living outside of the home changes how the family relates to each other because individual change has occurred. Emerging adult theorists suggest there is a renegotiation of the parent-child relationship during emerging adulthood in regards to independence, privacy and boundaries (Arnett, 2006; Trommsdorff, 2006). Aquilino (1997) reported that when children leave home, the quality of the relationship with their parents becomes more positive. Theory suggests that emerging adults come to view their parents more as persons than parents, empathizing more with them. Understanding the quality of the parental relationship is important as it is thought to contribute to individuation, capacity for other significant relationships, and psychological adjustment (Tubman & Lerner, 1994a).

Recentering is one theory that may explain the changes that occur in relationships between parents and emerging adults. Recentering describes a shifting of power, dependence, and responsibility from the family of origin to the emerging adult. Emerging adults seek to move from parental regulation to self-regulation. Three stages comprise the recentering process. Stage 1 represents the end of adolescence and the beginning of emerging adulthood. During this stage, parents are no longer legally responsible for their child, but emerging adults assume this responsibility. Tanner also speaks to the individual process of becoming responsible for the self

and the movement towards creating a value system. However, even though individuals are beginning to take responsibility for self and creating their own value system, they are still embedded within their family system. Stage 2 is called “emerging adulthood proper” in which there is an increase in educational, occupational, and relational activities that promote identity exploration. These activities may be rather transient in nature and duration, as suggested by changing majors in college, trying out “summer jobs,” and moving in and out of romantic relationships. Concerning the family, the emerging adult is no longer embedded in the family of origin but still connected to it. A recentering concerning relationship boundaries within the family ensues. Aquilino (2006) suggests that a renegotiation of relationships, interaction patterns, and boundaries take place during this time. The fact that many emerging adults are still dependent on their parents financially makes this renegotiation of the relationship complex. Stage 3 of the recentering process is the emerging adults’ entrance into young adulthood. Typically during this stage, individuals make more long-lasting commitments to careers and partners, solidifying life goals.

Grolnick, Deci, and Ryan (1997) believe that growing autonomy decreases value transmission and is consistent with Tanner’s theory of recentering. However, Aquilino (2006) states that emerging adults’ relationship with their parents is still positive and close, remaining influential in emerging adults’ life decisions. This suggests the capacity for relatedness even in spite of growing autonomy. This is an example of the contradiction that exists in the literature concerning family influence on emerging adult value development. Assessments of the parent-child relationship typically include self-report, Likert-scale measures comprised of subscales measuring different aspects of the relationship. The Quality of Relationships Inventory, created by Pierce, Sarason and Sarason (1991) is a 25-item, Likert-scale questionnaire that measures the supportive nature and quality of a relationship. It is comprised of 3 subscales including support,

depth, and conflict. The support subscale evaluates the extent to which the respondent perceives the other person to be a source of support in various situations, the depth subscale measures the importance of the relationship to the respondent, and the conflict subscale assesses the amount of conflict in the relationship. This measure has been used to assess the parent-child relationship as well (Pierce et al., 1997), with some researchers combining the support and depth subscales due to high internal consistency (Schapeler-Bergen, 2006).

Concerning family influence and value transmission in emerging adults, more recent studies by Schwartz (2010) suggests that values only inform behavior if they are seen as relevant in the situation, or in other words, the more important the value is to an individual the more likely it will be congruent with behavior. Values motivate behavior only if they are activated. Activation is a cognitive process that may or may not be conscious, where the more readily available a value is cognitively, the more likely it is to be activated. Therefore, socializing an individual to a value may occur through creating opportunities in the environment that bring certain values to conscious awareness, which may activate those values. Frequency of communication between parents and emerging adults may lead to the activation of values and contribute to value transmission.

Just as cultural and economic changes have contributed to the emergence of a new developmental period, emerging adulthood, likewise, technological advances in the culture have led to new forms of communication, including email, text messaging, and social networking. These forms of communication have increased the frequency with which students in college can stay in contact with parents. Research has typically focused on the communication and relationship between parents and adolescents still living at home, and so it is helpful to advance this research by studying emerging adulthood and parental communication (Aquilino, 1999).

Family communication has been defined as “the act of making information, ideas, thoughts and feelings known among members of a family unit” (Olson & Barnes, 2006, p. 1). Communication defines the quality of relationships, and it can help family members create a balance between individuation and closeness, which is particularly salient to emerging adult development (Arnett, 2004; Barnes & Olson, 1985; Grotevant & Cooper, 1983). In other words, expressed communication can describe the types of relationships family members have with one another. Based on a meta-analytic review of family communication studies, open communication, defined as conversations on a variety of topics in which parents encouraged exploration, freedom to express differing opinions, and conjoint decision making has been shown to be statistically related to general well-being and positive psychosocial outcomes (i.e., self-esteem, anxiety, depression, life stress) in members of families (Schrodt, Witt, Messersmith, 2008).

Typically, communication has been measured through self-report inventories and often includes items which have a relational component to them. For example, in the Family Communication Scale (FCS; Olson & Barnes, 2006), some of the items ask about the level of honesty, respect, understanding, and authenticity present in the communication. All these constructs give information to the researcher about the type of relationship between family members. A predecessor of the FCS was the Parent-Adolescent Communication Scale (Barnes & Olson, 1982). This 20-item scale consisted of two subscales: open family communication and problems in family communication. The scale measured communication both from parent and adolescent perspectives and included questions regarding feeling understood, listened to, and trusted. Several studies reviewed in Olson and Barnes (2006) showed that more positive communication was linked to more positive social outcomes in adolescent populations with

diverse issues, including: alcoholism, teen pregnancy, suicidality, achievement, adjustment in stepfamilies, identity development, and sex education.

*Empirical evidence investigating family variables and values*

The following studies review the role of the family on emerging adult development, particularly in regards to values. Interestingly, family variables associated with value transmission in adolescence were not shown to influence emerging adults' report of their values directly (Walker, 2010). Rather, reports of family relationships, family activities that may communicate values, and order and structure in the home appeared to be related to emerging adults' perception of the importance of values to their parents. One reason for this finding may be that the FES, the measure used to assess the family variables, reflects factors that were formative in developing values and so are related to perceptions of parent values but not as much to emerging adult values.

In a study measuring race and gender differences in value transmission, 187 African American and Caucasian mothers and fathers were asked qualitative and quantitative questions regarding value themes they taught to their children and strategies used to do this (Pagano, Hirsch, Deutsch, & McAdams, 2002). Themes attained through qualitative questionnaires included individualism versus collectivism, religion, hardship, and education. A quantitative measure was used to assess parenting behaviors related to the following: contribution to society, wisdom, acting as a role model, and level of engagement in decision-making with their children. Mean age of the children was 23.2, with 50% male children, and 25% married children. Findings indicated that child age had no effect on parenting and that parents remain "active teachers" and work to communicate values beyond adolescence. One limitation of this study was a lack of information regarding children's reports of their parents' influence. Therefore, it is not possible to understand how the children perceived their parents' teaching strategies or if it affected the



report of their own values. However, it does suggest that parents believe they fill an active role in the value development of their emerging adult children.

Several studies have looked at age differences in value transmission. Knafo and Schwartz (2009) assessed 47 young adults and their parents and 47 adolescents and their parents using Grusec and Goodnow's 2-step model of value acquisition. While several important findings emerged, results indicated that adolescents perceived their parents' values more accurately but young adults showed higher acceptance of their parent values. Factors contributing to adolescents' perception included family demographic variables such as religion, social class, and participation in activities in which other people around the family held similar values. It appears that the more frequent the communication of a value message, the more likely it is to increase accuracy. Concerning young adults' acceptance of parent values, Knafo and Schwartz point to Aquilino's research that suggests leaving home may bring parents and their emerging adult children closer together because conflict and power struggles about personal choice decrease. One limitation of this study is that they did not measure any potential family variables that may affect young adults' level of acceptance of parent values.

Schonpflug (2001) studied 300 father-son dyads of Turkish heritage. Sons ranged between ages 14-19. Both fathers and sons filled out Schwartz's Value Questionnaire Survey, and sons completed measures on their perception of their father's parenting style, marital quality, and father's level of education. Regression analyses indicated that significant relationships between father and son collectivistic values was only found in early and middle adolescence but not in late adolescence (ages 18-19). This finding suggests that parent values may not influence emerging adults' report of their own values. Parenting styles that placed an emphasis on emotional interactions with children and responsiveness to child's needs was found to influence

transmission as well ( $\beta = .21 - .28, p < .01$ ) supporting the importance of fathers' communicated care and concern in the value transmission process.

Wetherill, Neal, and Fromme (2010) investigated the influence of parent values on their child's sexual behaviors during the transition from adolescence to emerging adulthood. They hypothesized the child's perception of parents' awareness and caring would influence sexual behavior. The study was completed with 1,847 adolescents (60% female) between the ages of 17-19. Participants answered questionnaires regarding sexual behavior, sexual values, perceived caring of parents (PAC), and perceived caring of peers. These questionnaires were filled out at Time 1, the last three months of high school, and Time 2, the last three months of the first college semester. Overall, PAC decreased between Time 1 and Time 2 across all participants. The authors hypothesized this to fit with Arnett's theory that emerging adults experience an increase in autonomy and a renegotiation of the parental relationship. Participants with more conservative sexual values engaged in less risky behavior. Participants with more liberal sexual values and the presence of unsafe sexual practices in high school predicted an increase in sexual behaviors in college, regardless of parent values or perceived care. Participants with high levels of parental and peer PAC engaged in less risky sexual behaviors if they had more conservative sexual values ( $\chi^2(3) = 37.59, p = .001$ ). Overall, PAC moderated the effect between sexual values and sexual behaviors. Findings from this study indicate that although PAC may decrease as the child transitions to college, family relationships and the communication of caring and concern impact the adolescent and young adult's report of sexual values and sexual behaviors.

The following studies investigated the role of family influence on moral, religious values in adolescents and emerging adults. White and Matawie (2004) hypothesized that family variables of cohesion, adaptability, and communication would play a significant role in moral value congruence between 218 parents and adolescent (ages 14-19) dyads. Moral values were

measured using White's revision of the Moral Authority Scale (MAS-R). The following sources that contribute to moral thought included: external (family and educator), principle (society and peers), and internal (self-interest) morality. Communication was measured using the Parent and Adolescent Communication scale, and included items such as "My mother/father tries to understand my point of view." Family variables of adaptability (flexibility in family roles) and cohesion (family time together) were also assessed using the FACES II. All respondents completed all questionnaires.

Regression analyses indicated that parents' external and principle morality significantly predicted the adolescents' principle and external morality. Moreover, the study showed that all three family variables significantly predicted adolescent external morality (but not principle or internal morality). Positive communication where adolescents are encouraged to actively participate in family discussions also increased the relationship between parent and adolescent moral values. The most significant predictor was family cohesion, which increased the relationship between adolescents' external morality and fathers' external morality. One interpretation of these findings offered by the authors is that adolescents who perceive their family as close and communicative are more likely to emphasize the importance of the family's influence on their moral decisions. It is interesting to note however, that neither parent values nor family variables significantly predicted internal morality of the adolescents. The authors hypothesize that at the later stages of development adolescents are becoming aware of other sources of value authority and question their parents' moral values in other domains.

Okagaki and Bevis (1999) looked at the perception and accuracy of daughters' view of parents' religious beliefs in 62 Caucasian, middle class undergraduate women and their parents. The authors measured several factors hypothesized to increase accuracy and acceptance of parental religious beliefs including: frequency of discussion, parental agreement on values,

importance of the belief to the parents, accurate perception of the belief, and the parent-young adult relationship.

Values were assessed through a religious beliefs questionnaire constructed by the authors. Parental characteristics including responsiveness and open communication were measured using the Parenting Style Survey (Michael & Sameroff, 1995 as cited in Okagaki & Bevis, 1999). Accuracy was measured using the absolute difference between the daughters' perception of parent beliefs and the parents' self-reported beliefs. Acceptance was measured by using the absolute difference between the daughters' self-reported beliefs and the perception of parent beliefs.

The study supported the role of accurate perception in Grusec and Goodnow's 2-step theory of value transmission. Open communication, particularly the frequency of family discussions, and parent agreement on values were shown to increase accuracy. Daughters' accurate perception of parent beliefs significantly contributed to the relationship of daughters' and parents' actual beliefs ( $R^2 = .71, p < .0001$  for mother-daughter dyads, and  $R^2 = .51, p < .0001$  for father-daughter dyads). Concerning acceptance, results showed daughters' expressed a greater desire to adopt their father's beliefs when the beliefs were more important to the father. Acceptance was also significantly related to the level of parental warmth in the relationship. Although small in sample size, this study suggests that a family's communication behaviors about values are important to accuracy and the quality of the relationship significantly influence acceptance.

Although the following study does not address values directly, it speaks to the importance of communication between parents and emerging adults and the role this relationship plays in development. Investigators looked at over 1,000 college students from various types of institutions (i.e., large research university, small liberal arts college) and their relationship and

communication with parents (Hofer, Souder, Kennedy, Fullman, & Hurd, 2009). Surveys constructed by the researchers included questions about the content, frequency, format, and initiation of student-parent communication and relationship quality, completed by both students and parents. Forms of communication included cell phone, email, text messaging, instant messaging, and Skype; the investigators labeled this type of communication as the “electronic tether.” Many parents reported that they communicated with their child much more than they communicated with their own parents during their college years, mostly due to technological advances.

In a pilot study, findings were surprising. While high school students expected and desired less communication with their parents; many students in their first year of college reported daily conversations with their parents. Overall, results showed that college students’ communicate with their parents almost twice a day, 13.4 times a week on average, most commonly through email or cell phone. No difference was found in first year students versus college seniors. No differences were seen in ethnic and racial background, parental income, or distance from college. Females communicated more and initiated more communication with parents than did males.

Results suggested that high communication frequency was related to several factors: increased parental regulation of behavior, increased parental dependency, and increased feelings of companionship and mutuality. Investigators hypothesized that the cost to the frequency of communication may be stunted autonomy and independence. However, most parents reported they believed their child was moving towards independence and spoke about a change in relationship from parent to mentor/role model. Students did report using strategies to avoid talking about certain subjects with their parents indicating some level of autonomous functioning. Overall, students reported being satisfied with the amount of communication with

parents, more so when they initiated the communication. Results also suggested that students reported mostly positive relationships with their parents. It may be that frequency of communication, such as email and text messaging, if related to value content, can serve as an environmental condition that activates specific values for emerging adults.

Communication variables appear to be a vehicle or facilitator of the parent-child relationship. While several studies have linked communication with adolescent value development and positive social outcomes, less is known about the role of communication in parent and emerging adult value development.

Findings from all of these studies suggest that the family impacts emerging adult development, but to what extent and in what ways is less clear. More research in this area would be helpful to clarify the role of family in this developmental period.

#### *The role of parent-emerging adult dyads in value transmission*

Some research suggests that the relationship between fathers and emerging adult children is particularly impactful. A close relationship with father is thought to be a predictor of well-being in young adults (Popenoe, 1996). Most research on parent-child relationships has focused on mothers (Nielson, 2007) and only focused on the implications of the absence of the father (East, Jackson, O'Brien, 2006). A few studies have looked at the presence and impact of fathers in the lives of adult children (Krampe & Newton, 2006). Findings suggest that fathers are as important as mothers in child well-being, and a poor relationship with father has been found to be a risk factor for decreased well-being, eating disorders, low self-esteem, and other psychological problems (Miller-Day & Marks, 2006; Rohner & Veneziano, 2001). In a 15-year longitudinal study of 423 college-aged daughters, most reported a loving relationship with their fathers (60%); however, they reported that they were emotionally closer and had greater communication with their mothers (Neilson, 2007). However, most of the daughters indicated

the desire to have this type of relationship with their fathers as well. This father-daughter relationship is important as it has been linked to more secure and meaningful romantic attachments, greater self-confidence, and more success in academic and career arenas when the father-daughter relationship is perceived by the daughter as close versus distant (Nielson, 2007).

Concerning values, no consistent findings emerge concerning the impact of parent-child dyads. Walker (2010) found that young adult women view their fathers' intrinsic values as the most important predictor of their own report of intrinsic values, and although the picture is complex, it appears that the father's role is important. While mothers continue to maintain influence, it appears that fathers have the opportunity with their emerging adult children to impact values (Okagaki & Bevis, 1999; Rohner & Veneziano, 2001). Knafo and Schwartz (2009) found that gender composition does matter for some values but not for others. For example, although sons accurately perceived father's level of importance for conformity and self-direction values, there was a negative correlation found for acceptance, meaning they described a different level of importance to those values than their fathers. Parent agreement about the value becomes an important piece for young adults' acceptance of opposite-sex parent's values. Findings suggests that the same-sex parent may serve as a role model, but that the opposite-sex parent can still have influence on emerging adults' values, particularly when there is parental agreement on the importance of the value. Further research investigating the impact of fathers and mother respectively and parental marital status may increase understanding of the process by which emerging adults choose and implement values.

#### Rationale

The term "emerging adulthood" (Arnett, 2000) is used to define a new era of development that has been brought about by economic, educational, and cultural changes in America and other westernized societies. This group is typically described as being 18-25 years

of age and encompasses both college and non-college populations. One challenge of this age group is the struggle between autonomy and relatedness; it is a time when the individual has the opportunity to make both minor and major decisions independently but is also redefining and establishing important relationships. While emerging adulthood is a relatively new topic of research and some critics point out its limited cross-cultural applicability, it can be helpful in delineating specific opportunities and challenges faced by this age group. Given that a majority of emerging adults are attending college in some capacity, college students from 18 to 25 are a relevant population to study from this developmental framework.

Values research with this population is salient because one potential developmental task of emerging adulthood is identity exploration, and developing a system of values that serves to motivate and guide behavior is seen as a part of this task (Archer, 1994; Schwartz, 2010). Using both old and new theories of identity development, Schwartz and Pantin (2006) proposed 2 tasks of identity development: integrating the external world and differentiating oneself as unique, or the process of individuation. In addition, identity exploration is more likely to take place during normative transitions, such as leaving adolescence and entering college or a career, than in non-normative transitions (i.e., death, traumatic experience). It may be that graduating high school and entering college is an opportunity for further identity development, which may include further development of a value system. Emerging adults may shape their identity through selecting and prioritizing important values that will serve to inform their decisions; however, little research exists concerning the development of values with this population. Therefore, the current study investigated emerging adult values in an effort to add information to the literature about value development in this population.

Self-determination theory may be a framework in which to understand and measure values in emerging adults. In addition, self-determination theory separates values into intrinsic



and extrinsic categories. Extant research supports the importance of intrinsic versus extrinsic values in the college student population and the effects on well-being. Emphasizing intrinsic over extrinsic values appears to be important for psychological well-being. Research suggests that intrinsic values are significantly related to positive well-being, life satisfaction, and psychological adjustment in adolescents and college students (Kasser & Ryan, 1993, 1996; Schmuck, Kasser, & Ryan, 2000; Sheldon & Kasser, 1995). The Aspirations Index, which measures intrinsic and extrinsic values, was used to measure values for both participants and their parents in the current study.

The development of a value system does not occur in a vacuum but is influenced by many contextual factors. In particular, one's family of origin is considered to influence individual's value attainment (Grusec & Goodnow, 1994). Further, research suggests that parents and family continue to play an active role in the lives of emerging adults (Pagano, Hirsch, Deutsch, & McAdams, 2002). Research has shown that the more important a child perceives a value to be to the parent, the more likely it is to have importance for the child. Research on the congruence or similarity between actual parent values and child/adolescent values has historically been low (Rokeach, 1978; Whitbeck & Gecas, 1988). Therefore, Grusec and Goodnow proposed that it is the perception of parent values that is the greatest predictor of child/adolescent values. Further, value transmission is thought to be a 2 step process in which adolescents accurately perceive parents values and then accept them. However, the congruence between actual parent values and emerging adults' values has not been studied. Therefore, in the current study, both actual and perceived parent values were measured to assess which best predicts emerging adult values; however, based on past research, it was expected that perceived parent values would be better predictors of emerging adult values.

But just how does the family influence emerging adult's value development? Research suggests that the family environment plays a role in the development of values. Researchers have shown that parenting style, quality of relationships, and aspects of the family environment such as family activities and clear family structure impact the communication of values from parent to adolescent (Day et al., 1992; Kasser, Ryan, Zax, & Sameroff, 1995). However, while some studies have suggested a mediating influence of the family environment on value development, other findings suggest that the family environment is not directly linked to college students' self-reported values (Walker, 2010). These findings suggest that the way in which family influences emerging adult values is different than in adolescence. One potential reason for these findings is that emerging adults are more independent and may not be living at home, therefore the salience of the family environment is not the same as it may be for younger children. It was hypothesized that family environment variables more directly influence emerging adults' perception of their parents' values than emerging adults' own values. The Family Environment Scale (Moos & Moos, 1986) reflects factors that were formative in developing values, and so are related to perceptions of parental values, but may not be as relevant to communication about values in the current parent-emerging adult relationship. In particular, Walker (2010) found that family activities that may communicate values and quality of the parent-child relationship were linked to adolescents' perception of parents' intrinsic values, while family organization and structure were linked to perception of parents' extrinsic values. This study used the FES Relationship, Personal Growth, and System Maintenance indices to measure the quality of the family's relationship, family activities that may communicate values, and organization and structure in the home respectively, as a way to replicate the relationship between these family environment variables and emerging adults' perception of their parents' values.

While the family environment may primarily influence adolescents' perception of their parents' values, the quality of current communication in the relationship between mothers and fathers and their children may have more impact on emerging adults' current thinking about values (Okagaki & Bevis, 1999; Schrodt, Witt, & Messersmith, 2008). Findings from this body of literature suggest that even when students leave home, they remain in contact with their parents through phone, email, and text messaging. This communication is thought to be a reflection of the parent-child relationship (Barnes & Olson, 1985; Hofer, Souder, Kennedy, Fullman, & Hurd, 2009; Olson & Barnes, 2006). White and Matawie (2004) found that quality of communication impacts value congruence between parents and adolescents, in particular more positive communication was linked to higher value congruence. While research has shown a connection between perceived parent values and adolescent and young adult values, processes that may contribute to this relationship or impact the outcome are less known (Knafo & Schwartz, 2009). Therefore, in this study, the Family Communication Scale (Olson & Barnes, 2006) was used to assess the potential moderating effect of the quality of communication between the participants and their mothers and fathers, respectively. Parent values will only impact emerging adult values if there is discussion to make those values salient. More broad factors that are thought to contribute to emerging adults current thinking about values is the quality and supportive nature of the parent-child relationship. In particular, the more positive the relationship between parent and child, the more similar the values the children reported to the values thought important by their parents (Okagaki & Bevis, 1999). Therefore, the Quality of Relationship Inventory (Pierce, Sarason, & Sarason, 1991) was used to assess the level of support and depth in emerging adults' relationships with their fathers and mothers, respectively.

Another question concerning family influence on emerging adults' values concerns the role of the mother and the role of the father. Most research on parent-child relationships has

focused on mothers; however, more current research trends are assessing the presence of father and father love on psychosocial outcomes (East, Jackson, & O'Brien, 2006; Rohner & Veneziano, 2001). Findings suggest that fathers are as important as mothers in child well-being (Rohner & Veneziano, 2001). Walker (2010) found that for female college students' fathers' intrinsic values were the best predictor of their own report of intrinsic values, and although the picture is complex, it appears that the father's role is important. The current study measured mother and father's values separately, as well as, emerging adult's perception of the quality of the relationship with each of their parents.

One controversy in the literature concerning emerging adult development is the influence of family as emerging adults age. Some theories suggest that emerging adults rely less and less on their family to influence values and decision-making because they become more autonomous (Tanner, 2006; Schonpflug, 2001). However, other theories posit that relationships with parents remain important and can even become more positive throughout emerging adulthood (Aquilino, 1997; Aquilino, 2006; Pagano, Hirsch, Deutsch, & McAdams, 2002). To gain empirical data concerning this controversy, the current study included age as a control variable in analyses including emerging adult values to assess its impact on values and family variables.

## CHAPTER III

### METHOD

#### Participants and Procedures

Participants received research credit for specified psychology courses for their and their parents' participation. Data was collected from participants and their parents using an online survey engine called SurveyGizmo; all the below mentioned measures were uploaded to the online survey. The survey allowed participants to answer questions and revisit their answers to change them if so desired.

In order to protect participants' confidentiality, data from each participant was assigned a code number and kept separate from the participant's name. Participants were told that they may discontinue the survey at any time. This project received approval by the University of North Texas Institutional Review Board for the Protection of Human Subjects.

#### Description of the Sample

A description of the sample characteristics are presented in Table 1. The sample consisted of 200 students between the ages of 18-26. Selection criteria limited participants to ages 18 to 26 in an effort to be consistent with the age ranges for emerging adulthood suggested in the literature.

The 200 participants consisted of 101 males (50.5%) and 95 females (47.5%) and 4 participants did not provide a gender. The mean age of the participants was 20.24 years ( $SD = 1.82$ ). The sample was primarily Caucasian (61.5%), followed by African-American (21.0%), Hispanic (7.0%), Asian (6.5%), biracial/multiracial (2.5%), other ethnic/racial background (1%), and Middle Eastern (0.5%); the sample was similar to the university population. Students with freshman class standing represented 31.0% of the sample, followed by sophomores at 27.4%, juniors at 22.3%, and seniors at 18.8%.

Regarding religious preferences, 49.7% of participants identified as Protestant, 18.1% reported no religious preferences, 15.1% identified as Catholic, and 14.6% of participants indicated “other” for religious preferences. A large majority of participants (86.8%) reported living in a house or apartment, or a residence hall, with only 13% of participants still living with a parent.

## Instruments

### *Demographic information*

Demographic information was gathered to gain a more comprehensive understanding of environmental variables for each participant. Information including age, gender, ethnicity, religious orientation, parental educational level, and students’ place of residence (e.g., living with family of origin or outside of the home) was collected.

### *Parent and young adult values*

#### Emerging adult values

The Aspirations Index (Kasser & Ryan, 1996) measures seven broad goal contents that represent different values people may have. These goal contents can be divided into extrinsic and intrinsic categories. Wealth, fame, and image comprise the extrinsic category; personal growth, relationships, and community contribution make up the intrinsic category. The seventh goal content, health, is not included in either of the categories. The Aspirations Index has been revised since 1996. The original version of the AI did not measure level of goal attainment, contained more items than the revised version, and used a 5-point Likert scale versus the 7-point scale used currently. The reliability coefficients for the original version used only 32 items instead of the entire 42 because not all significantly loaded onto a broad goal content. Both versions of the AI assess the same 7 broad goal contents and contain an Importance subscale, which is the scale used in this study, and a Likelihood Scale. The revised version also added an

Attainment subscale. The revised Aspirations Index was used in this study; however, the validity and reliability coefficients from the original version of the AI are used here due to lack of these coefficients for the revised edition in the research.

On the revised version of the AI, the respondent is presented 35 value statements, each goal content is assessed by 5 items, and then asked to answer three questions about the value statement ranging from 1, meaning *not at all important/likely/expected/attained* to 7, meaning *very important/likely/expected/attained*. The three questions represent the three subscales of the AI and include: (1) how important is this to you, (2) how likely is it that this will happen in your future, and (3) how much have you already attained this goal?

Typically, the sum of the answers for all three of the subscales measuring importance, likelihood, and attainment is taken for each of the 5 items representing one goal content. The sum of the 5 items then renders a total score for that goal content. The extrinsic values can then be summed to obtain an extrinsic score and the same is done for the intrinsic values. Internal consistency for the goal contents in the intrinsic category is Cronbach's alpha = .86 and the extrinsic category is Cronbach's alpha = .94 (Kasser & Ryan, 1996; n = 192). Internal consistency is adequate.

Only the Importance subscale was used in this study because it is similar to the definition of values and measures the importance of the value. Measuring importance allows one to ascertain a hierarchical value system for each participant based on the amount of importance of each value versus its importance compared to another value. In addition, this study divided the goal contents into intrinsic and extrinsic categories. The importance scale for both the intrinsic and extrinsic categories can range from 3-21. Several studies specifically correlating the AI to possible value types, goals, or specific outcome measures have used the subscales on the AI (importance, likelihood, attainment) separately or in pairs. The majority of research using the AI

separates the 7 broad goal contents into intrinsic and extrinsic categories. The importance subscale becomes crucial to understand the relative importance an individual places upon each category as this is key in research outcomes (Kasser & Ryan, 1996, Kasser, 2002). These studies have also divided intrinsic and extrinsic values (Grouzet, F. M., Kasser, T., Ahuvia, A., Dols, J. M., Kim, Y. Lau, 2005; Kasser & Ryan, 1993; Kasser & Ryan, 1996; Ryan, R. M., Chirkov, V. I., Little, T. D., Sheldon, K. M., Timoshina, 1999). In particular, Grouzet and colleagues (2005) used the Aspirations Index Importance subscale to understand the amount to which respondents valued these goals. The mean alpha coefficients for the importance subscales are .76 (Kasser & Ryan, 1996; n = 192).

Participants completed this survey regarding their own values, and parents completed this survey regarding values in which they are trying to socialize their children. Schwartz typically measures parents' socialization values, or what values they think are important for their children versus their own values to gain a better understanding of what message the parents are trying to help their child receive; his research has found that parent's values for themselves and their socialization values for their children are highly correlated at .60-.80 (Knafo & Schwartz, 2009). The Cronbach alpha coefficient in the current study was .89 for emerging adult intrinsic values and .91 for emerging adult extrinsic values.

#### Perceptions of parent values

Young adults' perception of parental values was assessed using a researcher's condensed version of the AI. The decision to assess perception of parent values was based on research that shows higher correlations between perception of parent values and adolescent values than actual parent values and adolescent values. All of the 7 broad goal contents measured in the AI were presented in a list, and participants were asked to rate the importance of each value as they think their parents might rate them using a scale from 1, meaning *not important*, to 5, meaning *very*



*important*. Participants rated these values for father and mother individually. The three values that comprise the intrinsic scale and the three values that comprise the extrinsic scale were summed resulting in a scale ranging from 3-15. The Cronbach alpha coefficient was .71 and .77 for Perceived Mother Intrinsic and Extrinsic Values respectively, and .66 and .70 for Perceived Father Intrinsic and Extrinsic Values respectively.

A Total Importance Scale measured the extent that parents rated all values as important. A Total Importance Scale was computed because there may be general tendency, or response style, for participants to respond in a way that either rates all values as important or that rates all values as less important, making it difficult to ascertain which values are more important than others (Schmuck, Kasser, & Ryan, 2000). In the current study, a total importance score was calculated by averaging importance ratings across all six domains. The domain of health was not included in the total importance scale because previous research demonstrated through factor analyses that health fell neither in intrinsic nor extrinsic categories (Kasser & Ryan, 1996). Researchers have noted the importance of looking at the relative importance of one value type (intrinsic or extrinsic) over another, not just the presence or absence of it, in an effort to better understand a person's value system (Kasser, 2004). This has been accomplished through research methodology techniques such as computing a total importance score, including both intrinsic and extrinsic values, as a control variable in statistical analyses (Kasser, Ryan, Zax, & Sameroff, 1995; Schmuck, Kasser, & Ryan, 2000; Vansteenkiste et al., 2007). In the current study, the Cronbach alpha coefficient was .65 for the Mother Total Importance scale and .60 for the Father Total Importance scale.

### *Family variables*

#### Family Environment Scale (FES)

To assess family environment variables thought to play a role in young adults' perception of their parents' values, the Family Environment Scale Form R (© Consulting Psychologists Press Inc., 1974, Moos & Moos, 1986) was used. The test is comprised of 90 true-false questions. The FES consists of 10 subscales, 9 items per subscale; the 10 subscales are then compiled into 3 indices (Relationship, Personal Growth, and System Maintenance). All 3 indices of Relationship, Personal Growth and System Maintenance were assessed in this study. The total score of the Relationship index of the FES, which includes the subscales cohesion, expressiveness, and conflict, was used to assess the family's relationship in this study. These variables support the needs of relatedness and autonomy in self-determination theory. Activities in the family that may communicate values will be assessed by the total score of the Personal Growth index, which includes intellectual-cultural orientation, active-recreational orientation, and moral-religious emphasis scales. The subscales in this dimension highlight family activities that are emphasized and can be linked to the family's value system. This dimension is important because research supports the idea that family activities serve to enhance the value transmission process because these activities help communicate values within the family dyad. The total score from the System Maintenance index was used to assess the level of functioning and structure present within the family. This index includes the subscales organization and control. The control subscale assesses the amount of family rules and procedures that govern a household. The organizational subscale is a measure of roles within the home, assessing the clarity and uniqueness of each role. This gives an overall picture of family harmony. Research suggests that value transmission occurs most readily when the family is functioning in a healthy way.

Adequate reliability for all scales was reported, ranging from .61 to .78 using a norm sample of 1,432 normal families and 788 distressed families (Moos & Moos, 1986). However, Roosa and Beals (1990) have found lower internal consistency coefficients on a sample of 311 distressed families. In response, test authors argue internal consistency is higher in more diverse samples, that is, in samples with more item and subscale variance. Overall, the FES is considered to be a reliable measure of family functioning.

In this study, answers marked true were given a score of 1 and false answers were given a score of 0; each scale received a score ranging from 0-9. The 10 subscales load onto one of three indices and were summed to obtain 3 index scores. The total scores for each index were used to assess three family variables in this study thought to contribute to the young adults' perception of parent values: family relationship, activities that may communicate values, and level of family functioning. Summing the scaled scores to obtain an overall index score has been done before using the Relationship index. Several studies have found high internal consistency and good construct validity within the 3 subscales of the Relationship index (Moos & Moos, 1986). The current study also used all 3 subscales in the Relationship index, cohesion, expressiveness and conflict. The conflict subscale was reversed score so that a high score on the subscale indicated that the participant reported low levels of conflict in the relationship, while a low score on the conflict subscale indicated a high reported level of conflict in the family relationship. The Cronbach alpha coefficient for the Relationship Index was .83. To measure the Personal Growth index, other researchers have used 4 subscales (academic-achievement orientation, intellectual-cultural orientation, active-recreational orientation, and moral-religious emphasis; Moos & Moos, 1986). However, based on past Cronbach alpha coefficients with a college student population (Walker, 2010), the researcher chose to use 3 subscales (intellectual-cultural, active-recreational, and moral-religious) because the questions that comprise these subscales most

closely reflect a family's activities that may communicate the family's value system; the Cronbach alpha coefficient was .70. The 2 subscales that comprise the System Maintenance index were used to measure overall family functioning, and the Cronbach alpha coefficient was .65.

#### Family Communication Scale (FCS)

The FCS is a 10-item self-report inventory with a 5-point Likert scale with responses ranging from 1, *strongly disagree* to 5, *strongly agree* that measures communication among family members (Olson & Barnes, 2006). The Parent-Adolescent Communication scale (PAC) was the predecessor of the FCS and consisted of 20 items and included both a parent and adolescent form (Barnes & Olson, 1982; Barnes & Olson, 1985). The PAC was comprised of two subscales: open family communication ( $r = .87$ ) and problems in family communication ( $r = .78$ ). Through a meta-analytic review, the author of the scale found that the open family communication subscale was the most predictive statistically of quality of communication, and the Family Communication scale was created as a result of this review in an effort to enhance the validity and reliability of the measure. Authors Olson and Barnes (2006) report internal consistency at .90 based on a norm sample of 2, 465 participants; test-retest reliability is .86. The FCS is a measure that is comprised within a larger inventory called FACES IV, which also measures cohesion and adaptability of the family across the lifespan. The FACES IV is based from Olson's theoretical Circumplex Model of Marital and Family Systems which classifies typologies of family, including balanced, mid-range, and extreme. The balanced family is considered to be most optimal because a balance exists between cohesion and adaptability that allows for flexibility to meet family needs at different times, such as newly married or empty nest periods. The presence of cohesion and adaptability is facilitated by the quality of communication between family members.

Questions on the FCS are worded in regards to communication among family members. For example, one question asks, “Family members are satisfied with how they communicate with each other.” A total score was computed by adding the responses to all 10 questions; the score can range from 0-50, with a higher score indicating more positive communication. Cronbach’s alpha coefficient for the FCS in the current study was .90.

#### The Quality of Relationships Inventory (QRI)

The QRI is a 25 item self-report inventory with a 4-point Likert scale with responses ranging from 1, *not at all* to 4, *very much* that measures the quality and supportive nature of the relationship between parent and child (Pierce, Sarason, & Sarason, 1991). Three subscales comprise the QRI: support (7 items), depth (6 items), and conflict (12 items inversely scored). Based on findings from Bergen-Schapeler (2006), high internal consistency between the support and depth subscales justify combining the two subscales to produce a total support/depth score, called the Emotional Support score. In the current study, the total support/depth score was computed by adding the responses from the support subscale and dividing by the number of items in that subscale; the same procedure was repeated with the depth subscale. The two subscales were then summed to get an overall total score. The conflict subscale was not used in the current study because only support and depth was hypothesized to strengthen value similarity based on the literature. Separate questionnaires were completed by the respondent for both mother and father. Cronbach alpha coefficients were .94 for Mother Emotional Support and .95 for Father Emotional Support.

#### Hypotheses

The following hypotheses were formulated based on current values and family literature and were tested in this study. (see Appendix C)

#### Hypothesis I: Emerging Adult Intrinsic Values

- A. Perceived parent intrinsic values will be better predictors of emerging adult intrinsic values than actual parent values.
- B. Perceived father and mother intrinsic values will be positively correlated with emerging adult intrinsic values.
- C. The quality of current communication between parents and emerging adults will moderate the relationship between perceived parent intrinsic values and emerging adult intrinsic values.
- D. Emotional support, as defined by the total score of the support and depth subscales of the QRI, will moderate the relationship of intrinsic perceived parent values and intrinsic emerging adult values.

#### Hypothesis II: Emerging Adult Extrinsic Values

- A. Perceived parent extrinsic values will be better predictors of emerging adult extrinsic values than actual parent values.
- B. Perceived father and mother extrinsic values will be positively correlated with emerging adult extrinsic values.
- C. The quality of current communication between parents and emerging adults will moderate the relationship between perceived parent extrinsic values and emerging adult extrinsic values.
- D. Emotional support, as defined by the total score of the support and depth subscales of the QRI, will moderate the relationship of extrinsic perceived parent values (for father and mother) and extrinsic emerging adult values.

Hypothesis III: Family variables, including relationship, activities, and structural elements, will be positively correlated with perceived parent values.

- A. Family variables of positive family relationships and activities will be positively correlated to perceived parent intrinsic values.
- B. Family variables of structure and order will be positively correlated to perceived parent extrinsic values.

### Design and Analyses

Hypothesis I and II: A regression analysis planned to assess whether Actual Parent Values for father and mother are significantly related to Emerging Adult Values. Regression analyses were planned to calculate both actual parent and emerging adult intrinsic values and both actual parent and emerging adult extrinsic values, with actual parent values as the predictor. Separate regression analyses were conducted to assess the relationship between Perceived Parent Values and Emerging Adult Values. Again, regression analyses were calculated for both perceived parents and emerging adult intrinsic values and both perceived parents and emerging adult extrinsic values, with perceived parent values as the predictor. In both analyses, the Total Importance scale was entered as a control variable to account for the relative importance of extrinsic values in the intrinsic regression analyses and vice versa. To compare the predictive value of Perceived Parent Values versus Actual Parent Values on Emerging Adult Values, a *t*-test was planned to test for statistical difference between the two constructs.

Multiple regression analyses assessed whether current communication between parents and emerging adults, as well as, emotional support of father and mother respectively moderate the relationship between Perceived Parent Values (father and mother) and Emerging Adult Values (Baron & Kenny, 1986; Frazier, Barron, & Tix, 2004). Analyses were conducted for intrinsic and extrinsic values separately. According to an a priori power analysis (Faul, Erdfelder, Lang, & Buchner, 2007), 46 participants were required to obtain a medium effect size, with  $\alpha = .05$ , for multiple regression analyses.

Age was analyzed for potential significant correlations among the independent and dependent variables to ascertain whether it should be used as a control variable in all analyses that involve emerging adult values.

Hypothesis III: Regression analyses assessed whether the Relationship and Personal Growth Indices of the FES were significantly related to Perceived Parent Intrinsic values. Correlation analyses assessed whether the System Maintenance Index of the FES were significantly related to Perceived Parent Extrinsic values. The family variables are the total scores from each of the three indices on the FES.



## CHAPTER IV

### RESULTS

#### Description of the Variables

##### *Values*

The means of the Perceived Parent Values scales indicated that participants' scored the importance of intrinsic values higher than the importance of extrinsic values for their parents (see Table 2;  $t = 16.89, p = .00$  for mothers,  $t = 9.30, p = .00$  for fathers). The means of the Young Adult Values scales showed that participants rated intrinsic values as more important than extrinsic values ( $t = 20.57, p = .00$ ). Compared to importance subscale means in another study using college students, the current study found higher means for both intrinsic and extrinsic values (Schmuck, Kasser, & Ryan, 2000). A significant gender difference was found regarding intrinsic values; females reported that intrinsic values were more important to them than did males (see Table 2;  $F = 8.47, p = .00$ ). Means for the six AI domains that comprise intrinsic and extrinsic values were calculated and are reported in Table 4.

##### *Family Environment Scale (FES)*

Means for all 3 Indices, Relationship, Personal Growth, and System Maintenance, were all within the average range and were not significantly different from one another (see Table 2).

##### *Family Communication Scale (FCS)*

The quality of communication among family members was assessed using the Family Communication Scale. The overall mean from the current study ( $M = 35.56$ ) showed that emerging adults reported positive and supportive family communication at an above average level (mean of FCS is 25.00; see Table 2).

### *Quality of Relationships Inventory (QRI)*

Results of the Emotional Support score, consisting of the support and emotional depth subscales, indicated a higher mean for mothers than for fathers. A paired-samples t-test showed that this difference was statistically different, suggesting that participants see their relationships with their mother as being more supportive and having greater emotional depth than their relationships with their fathers. (see Table 2 for means;  $t = 5.95$ ,  $p = .00$ ).

### Preliminary Analyses

Prior to the main analyses, the variables were examined for accuracy in data entry, out-of-range and missing values, and fit between their distributions and the assumptions of multiple regression. A missing values analysis was conducted on the data set and was not significant, indicating that the missing values occurred in a random pattern and did not significantly affect the outcome of the overall data. In the few cases where there was missing data, mean substitution was conducted. This method was suggested by Tabachnik and Fidell (2007) for larger sample sizes in which the missing values analysis was not significant. On variables that inquired about participants' parents, some participants left either mother or father scales blank if the parent was deceased or had not played a role in the participants' lives. These cases were not included in the analyses using scales that assessed those relationships. Some participants did not complete all of the questionnaires for unknown reasons.

Multicollinearity, or high correlations between independent variables, can have a negative effect on multiple regression models, inflating the size of error terms and weakening the power of the analysis (Tabachnick & Fidell, 2007). Therefore, correlations were run to assess for multicollinearity (see Table 5 and 6). Correlations between the Total Importance scale and Mother and Father Intrinsic Values and then Father Total Importance scale and Mother and Father Extrinsic Values were all very highly correlated ( $r > .7$ ; .73 to .76), as might be expected

because the Total Importance scale comprises both intrinsic and extrinsic values. However, because these variables were being used as a control in the analyses and not a predictor variable, this was not a cause for concern. None of the other independent variables were highly correlated ( $r > .7$ ), indicating no multicollinearity.

The histograms of seven variables demonstrated considerable negative skewness: Father Intrinsic Values, Mother Intrinsic Values, Emerging Adult Intrinsic Values, Mother Total Importance Scale (values), Father Total Importance Scale (values), Mother Emotional Support Score, and Father Emotional Support Score. In addition, scatterplots were examined for all variables to identify outliers, and these seven scales contained a small number of outliers (e.g., 2-3). As suggested by Tabachnick and Fidell (2001), the outliers were kept within the data and a reflect and square root transformation was performed on the Father Intrinsic Values scale, Mother and Father Total Importance scale, and the Father Sup/Depth scale, a reflect and logarithmic transformation was performed on Mother Intrinsic Values scale and the Mother Sup/Depth scale, and the inverse was taken of the Emerging Adult Intrinsic Values scale based on the shape of each scale's distribution. These transformations improved the normality of the distribution of scores and number of outliers. Reflecting these scales causes the interpretation of high and low scores to be reversed; therefore, the signs of the correlations on these scales were changed where appropriate to maintain the conceptual meaning of the scales' relationship to other variables. Correlations for all variables were conducted both before and after transformations were made on the seven scales (i.e., Father Intrinsic Values, Mother Intrinsic Values, Emerging Adult Intrinsic Values, Mother Total Importance scale, Father Total Importance scale, Mother Emotional Support score, and Father Emotional Support score; see Tables 6&7).

The Father Extrinsic Values scale had a slight positive skew but it was not significant. The Mother Extrinsic Value scale had a slight negative skew but it was also not significant; therefore no transformation of these variables was required. In regards to Emerging Adult Extrinsic Values scale, the distribution was normally distributed. Concerning family environment variables, the Relationship, Personal Growth, and System Maintenance indices did not violate multiple regression assumptions, although the Relationship and Personal Growth indices were more positively skewed. The Family Communication Scale was normally distributed.

Mean differences and correlations were examined with major demographic variables, such as age, gender, living situation, ethnicity, religion, and parental marital status, and the independent and dependent variables. There were no significant mean differences in regards to living situation and emerging adult values or perception of parent values. Initially, age was to be included as a control variable, but in exploratory analyses it was not significantly correlated with either independent or dependent variables and no significant mean differences were found, so it was not included in the primary analyses.

Differences were seen in the data regarding marital status (see Table 8 for correlations). For participants reporting intact families (married parents, either living together or apart), significant correlations were seen between both father and mother intrinsic and extrinsic values. Perceived Father Intrinsic Values and Father Emotional Support had a significantly higher mean as compared to other dependent variables in intact families. For participants whose parents were never married, divorced/separated, and/or deceased, Perceived Mother Intrinsic Values and Mother Emotional Support had a significantly higher mean as compared to other dependent variables. In general, family environment variables were more significantly related to parent values in intact families, including both father and mother values. In non-intact families, it

appears that family variables in relationship to mother values are significantly related, while father values are not as related to family variables as they are intact families. This suggests differences between intact and non-intact families.

### Primary Analyses

Hypothesis I and II-A stated that perceived parent values would be better predictors of emerging adult values than would actual parent values. This hypothesis was based on findings in the literature regarding value similarity between parents and adolescents and college students. However, very few parents responded to the online data survey inquiring about values (father  $n = 2$  and mother  $n = 6$ ) and an a priori power analyses required a greater  $n$  to obtain at least a medium effect size for a multiple regression analyses. Therefore, actual parent values were not included in statistical analyses. Qualitative data from parents' responses are included in Appendix H and their meaning extrapolated in the discussion section.

Hypothesis I examined potential variables that may predict emerging adult intrinsic values, including perceived parent values, family communication, and the level of emotional support in the relationship between father or mother and emerging adults. Multiple regression analyses were conducted to test these hypotheses; an alpha level of .05 was used to predict significance for all tests. Hypothesis I-B stated that perceived father and mother intrinsic and extrinsic values would significantly predict emerging adult intrinsic and extrinsic values, respectively. Similar to previous studies using the AI (Kasser & Ryan, 1993), this study used the total importance score as a control variable by entering it first into regression analyses. This accounts for the fact that some individuals may give an overall higher rating of values, both intrinsic and extrinsic making it difficult to distinguish which values are most important. By entering Total Importance as a control variable, when intrinsic values (or extrinsic) are added to the model, the relative importance of intrinsic (or extrinsic) values is evaluated (Kasser, 2004).

For hypothesis I-B, Emerging Adult Intrinsic Values, (see Table 9), the regression analysis included both Father and Mother Total Importance scales in Block 1 as a control, and was significant ( $F(197) = 3.60, p = .03$ ), with Mother Total Importance scale being the significant variable in the analyses and the block accounting for 4% of the variance. The addition of Block 2, which consisted of father and mother intrinsic values, produced a significant change in  $R^2$  ( $R^2$  change = .04,  $p < .05$ ,  $F(197) = 3.65, p < .03$ ), and the overall model proved to be significant accounting for a total of 7% of the variance in emerging adult intrinsic values. However, examination of the beta weights showed that only mother intrinsic values was a significant predictor of emerging adult intrinsic values ( $\beta = .28, p = .01$ ), indicating that when mothers valued intrinsic values more, emerging adults reported higher levels of intrinsic values.

Also, Perceived Father Intrinsic Values had a positive correlation, but a negative beta weight in the model. According to Tabachnick and Fidell (2001), when opposite signs are present in the correlation and beta weight of a variable, that variable may be acting as a suppressor variable. A suppressor variable acts to suppress variance that is irrelevant to the prediction of the dependent variable. It enhances the effects of other independent variables by virtue of its correlations with them. In this regression analysis, it appears that Perceived Father Intrinsic Values is acting as a suppressor variable. The father intrinsic values variable may account for the similarity of parents' values and highlight mothers' values that are different from fathers'. In addition, the Total Mother Importance Scale also appears to act as a suppressor variable. This suggests that mothers' rating of the overall importance of values perhaps contributes to irrelevant variance in the model; so the presence of the Total Importance scales performed its intended purpose of taking out this irrelevant variance and highlighting only the unique variance of perceived mother intrinsic values to emerging adults intrinsic values.

Overall, emerging adults report that their perception of the importance of intrinsic values to their parents, particularly mother, affects how important intrinsic values are to them.

Hypothesis I-C and D postulated that family communication and emotional support in the relationship between parent and emerging adult would moderate, or strengthen, the similarity between Perceived Parent Intrinsic Values and Emerging Adult Intrinsic Values. Using recommendations provided by Baron and Kenny (2004) for a moderation analysis, multiple regression was used to analyze two potential moderators in this study: the Family Communication Scale (FCS) and the Emotional Support variable, the average of the Support and Depth subscales that comprise the QRI, for both father and mother. All variables were standardized using  $z$  scores and unstandardized beta coefficients ( $B$ ) were examined to understand the interaction variable's contribution to the overall model as suggested by Baron and Kenny (2004). Regression analyses for all moderation tests were structured as follows: Block 1 consisted of the control variables, Father and Mother Total Importance scales, as in hypothesis I-A, Block 2 included perceived father and mother values and the addition of the moderator variable (FCS or Emotional Support). Block 3 added the interaction term (moderator variable  $\times$  independent variable, perceived parent values).

Regarding the FCS and intrinsic values (see Table 10), results from Block 1, the Control Block, were the same as seen in hypothesis 1-B. The addition of the FCS in Block 2 did not result in a significant change in  $R^2$  ( $R^2$  change = .04,  $p = .07$ ) although the model remained significant ( $F(198) = 2.91, p = .02$ ) and accounted for 7% of the variance. Block 3 indicated no change in  $R^2$  and the overall model including the interaction term was not significant ( $F(198) = 1.84, p = .81$ ). Overall, these analyses suggest that family communication does not directly strengthen intrinsic value similarity between parents and emerging adults.

The Emotional Support variable, consisting of the summed support and depth subscales of the QRI, was also assessed as a potential moderator between Perceived Parent Intrinsic Values and Emerging Adult Intrinsic Values and was structured similarly to the above analyses with the FCS (see Table 11). Results for the Control Block were the same as seen in hypothesis I-B. Similarly to the previous analysis with the FCS, the addition of the moderator variable in Block 2 and the interaction term in Block 3 did not significantly change the variance accounted for in the model; therefore, emotional support did not strengthen the relationship between Perceived Parent Intrinsic Values and Emerging Adult Intrinsic Values. Although the  $R^2$  change was non-significant upon the addition of the interaction term in Block 3, the beta weight for the interaction term, Perceived Mother Intrinsic Values x Mother Emotional Support, was significant in the overall model ( $\beta = .18, p = .03$ ). These findings suggest that the interaction of high emotional support from mother and higher perceived importance of mother intrinsic values may contribute, to a small degree, to value congruence of emerging adults. Overall, the analyses suggest that emerging adults' perception of mother intrinsic values significantly contributes to how important they view intrinsic values for themselves; however, the quality of family communication and the presence of emotional support alone did not strengthen value congruence.

Hypothesis II examined potential variables that may better predict emerging adult extrinsic values, including perceived parent values, the quality of family communication, and the presence of emotional support between father or mother and emerging adults. For hypothesis II-B, Emerging Adult Extrinsic Values (see Table 12), the regression analysis included both Father and Mother Total Importance scales in Block 1 as a control, and was significant ( $F(197) = 16.49, p = .00$ ) accounting for 15% of the variance. The addition of Block 2, which consisted of father and mother extrinsic values, produced a significant change in  $R^2$  ( $R^2$  change = .10,  $p = .00$ ;  $F$



(197) = 15.90,  $p = .00$ ) and the overall model proved to be significant accounting for a total of 25% of the variance in emerging adult extrinsic values. Examination of beta weights indicated that only mother extrinsic values significantly predicted emerging adult extrinsic values ( $\beta = .42$ ,  $p = .00$ ), indicating that when mothers were perceived as valuing extrinsic values more, emerging adults reported higher levels of extrinsic values. The Parent Total Importance scales, although significant in the control block, emerged as insignificant in the 2<sup>nd</sup> block and carried negative beta weights but positive correlations suggesting that these variables were acting as suppressor variables as they did in the intrinsic analyses.

Hypothesis II-C and D postulated that family communication and the level of emotional support between parent and emerging adult would moderate, or strengthen, the similarity between Perceived Parent Extrinsic Values and Emerging Adult Extrinsic Values; analyses were structured identically to hypothesis I- C and D. Regarding the moderation analysis with the FCS, results from Block 1, the Control Block, were the same as seen in hypothesis II-B (see Table 13). The addition of the FCS in Block 2 was significant ( $R^2$  change = .11,  $p = .00$ ;  $R^2 = .25$ ,  $F(198) = 12.99$ ,  $p = .00$ ) and accounted for 25% of the overall variance of the model, with Perceived Mother Extrinsic Values the only significant contributor in Block 2 ( $\beta = .41$ ,  $p = .00$ ). Interestingly, the FCS was negatively correlated with the dependent variable in the model ( $r = -.09$ ), but not significantly. Although the addition of Block 2 resulted in a significant change it appears that was due only to the effect of Perceived Mother Extrinsic Values and the addition of communication (FCS). The addition of Block 3, which included the interaction term, was not significant; therefore, the FCS did not moderate the relationship between parent extrinsic values and emerging adults. As in hypothesis II-B, regarding parent and emerging adult values, the Total Importance scales appeared to act as suppressor variables in this analysis as well. Overall,

these analyses suggest that family communication does not directly strengthen extrinsic value congruence between parents' and emerging adults' extrinsic values.

Regarding Emerging Adult Extrinsic Values and the Emotional Support score (see Table 14), results from the Control Block were the same as seen in hypothesis II-B. The addition of Father and Mother Emotional Support in Block 2 was significant ( $F(198) = 10.79, p = .00; R^2 = .25, p = .00$ ) and accounted for 25% of the variance in the model. Both Perceived Father and Mother Extrinsic Values significantly contributed to the model (Father:  $\beta = .24, p = .04$ ;  $\beta = .36, p = .00$ ). It appears that the addition of the Father Emotional Support score increased the contribution of Perceived Father Extrinsic Values enough that it was significant by acting as a suppressor variable. Also, similarly to communication, it appears that the addition of emotional support in the model did not add significantly to the predictive power of the overall model in comparison to the analysis where father and mother extrinsic values alone were in Block 2 (see Table 11). The addition of the interaction terms in Block 3 did not produce a significant change in variance accounted for ( $R^2$  change = .01,  $p = .31$ ). The variables, Total Father Importance Scale and Father Emotional Support, appeared to act as suppressor variables, enhancing the significant contribution of both Perceived Father and Mother Extrinsic Values. Overall, Father and Mother Emotional Support did not moderate the relationship between Perceived Parent Extrinsic Values and Emerging Adult Extrinsic Values; however, emotional support in the paternal relationship may indirectly enhance the influence of extrinsic parent values on emerging adults' values.

Also, it is important to note that the independent variables were more predictive of emerging adult extrinsic values than intrinsic values. This may be due to the fact that there is more variance present in the participants' report of the importance of extrinsic values. The scales for both parent and emerging adult values were normally distributed, highlighting this

variance, and did not need to be transformed as the intrinsic values scales were, which can sometimes reduce the statistical power of analyses (Tabachnick & Fidell, 2004).

Hypothesis III-A stated that the Relationship and Personal Growth Indices of the FES would be significantly related to perceived Parent Intrinsic values. Father and mother perceived intrinsic values were addressed in separate analyses. For Perceived Father Intrinsic values, regression results suggested that the overall model was significant ( $F(197) = 10.46, p = .00$ ) and accounted for 10% of the overall variance (see Table 15). Examination of the beta weights indicated that both the Relationship Index ( $\beta = .20, p = .01$ ) and the Personal Growth Index ( $\beta = .19, p = .01$ ) significantly contributed to the variance in the model. For perceptions of mother intrinsic values, both the Relationship and Personal Growth indices were significant as well ( $F(199) = 8.78, p = .00$ ; Relationships Index  $\beta = .18, p = .01$ ; Personal Growth Index  $\beta = .17, p = .02$ ) and accounted for 8% of the overall variance in the model (see Table 16). This suggests that the closer family members are to one another and the greater number of activities they engage in together, the more important emerging adults report intrinsic values to be to their parents.

Hypothesis III-B stated that the System Maintenance Index of the FES would be significantly related to Perceived Parent Extrinsic Values. This relationship was assessed using Pearson-product correlations (see Table 7). Results indicated a significant positive correlation with Perceived Father Extrinsic Values ( $r = .20, p = .01$ ) but no significant relationship with Perceived Mother Extrinsic Values ( $r = .14, p = .06$ ). These findings indicate that the more rules and structure that are present in the family system, the more important emerging adults report extrinsic values to be to their fathers.

## CHAPTER V

### DISCUSSION

#### Summary of Findings

Using a developmental framework based on Arnett's construct of emerging adulthood, the current study measured values in a college student population and explored the influence of perceived parent values, family environment variables, and family communication and relationship variables on college students' values. In particular, family environment variables were thought to be linked to emerging adults' perception of their parents' values, while family communication and the supportive nature of parent-child relationships were hypothesized to moderate or strengthen the relationship between students' perception of parents' values and their own values. Due to findings in the literature that not only mothers, but fathers as well, play an important but differing role in the lives of their children, the current study separated mother and father data to understand the specific roles of each parent. Also, theoretical literature postulates that age is a determining factor in emerging adults' relationship with their parents, and indirectly, the influence of parent values on emerging adult values. The current study sought to examine the influence of age to determine its' role in value development with this population; however, exploratory analyses revealed no significant correlations between age and the study's variables.

Data collection included 200 college students at the University of North Texas and their parents. Originally, hypothesis I-A included analyses exploring the impact of actual parent values (parents reports of values they think are important for their children to learn) and perceived parent values (emerging adults' perception of what values are important to their parents). However, only seven parents completed the online survey, so the number was not great enough to compare actual parent values to perceived parent values in statistical analyses. However, qualitative responses regarding ways in which parents taught values were explored.

Hypothesis I-B stated that perception of parent intrinsic values would significantly predict emerging adult intrinsic values and this hypothesis was supported. Hypothesis I-C and D stated that family communication and an emotionally supportive relationship with father and mother would act as moderators in the relationship between perceived parent intrinsic values and emerging adult intrinsic values; these hypotheses were not supported. Hypothesis II repeated the same analyses as Hypothesis I but assessed extrinsic values. Hypothesis II-B was supported and perceived parent extrinsic values were significant predictors of emerging adult extrinsic values. Hypothesis II-C and D was not supported as family communication and an emotionally supportive relationship with parents did not moderate the relationship between perceived parent and emerging adult extrinsic values.

Lastly, hypothesis III purported that certain family environment variables would be linked to emerging adults' perception of values important to their parents. This hypothesis was derived from findings of earlier research that supported these relationships (Walker, 2010). Also, it was thought that perceptions of parent values were formed within the framework of the whole family environment and may have been formed before the student entered college. Therefore asking about the family environment, even though the college student may not still live in the home, was seen as a valid way to begin to understand what aspects individuals attend to in order to determine the values of their parents.

Specifically, hypothesis III-A stated that relationships within the family and family activities were thought to be linked to both father and mother intrinsic values, and this hypothesis was supported. Hypothesis III-B stated that the amount of structure and order present in the home environment would be significantly correlated to father and mother extrinsic values. This hypothesis was partially supported; a significant positive correlation was found between family

structure and perceived father extrinsic values, but no significant correlation was found with perceived mother extrinsic values.

Several important findings emerged from the current study. First, results emerged regarding emerging adult values that address gaps in the emerging adult literature. Second, the hypothesis that emerging adult values were significantly related to their perception of parents' values was supported, thus suggesting that parent values remain important to emerging adults even after entering college. In addition, analyses between family variables and perception of parent values resulted in interesting findings that may serve to highlight the types of family variables that are related to specific types of values. Roles of the father and mother will be discussed. Third, family communication and emotional support did not add to value congruence between parents and emerging adults; therefore, other factors may be contributors. Lastly, implications for the findings of the current study will be discussed, as well as, limitations and future recommendations.

### Emerging Adult Values

Arnett postulates that emerging adulthood itself is characterized by exploration and development (Arnett, 2006). In particular, theoretical literature has suggested that value development is a key developmental task in emerging adulthood (Sheldon, 2004). However, little empirical research regarding value development in emerging adults exists and more data is needed to support the theoretical literature (Aquilino, 2006). Based on the literature, the current study explored whether emerging adults were thinking about values and which values were important. Regarding the types of values to measure, self-determination theory of motivation is a framework that has been used with a college student population to assess values. This theory postulates that individuals are motivated by three goals: autonomy, relatedness, and competency. Values that guide individuals as they move toward these goals include intrinsic (relationship,

personal growth, and community contribution) and extrinsic values (wealth, fame, and image). Therefore, the current study utilized the Aspirations Index importance subscale as a measure of intrinsic and extrinsic values (Schmuck, Kasser, & Ryan, 2000; Sheldon, 2004).

Several findings in the current study highlighted characteristics of values endorsed by an emerging adult college student population. First, participants reported that both intrinsic and extrinsic values are important to them; with intrinsic values being more important than extrinsic values overall. Personal growth appeared to be the most important intrinsic value, while wealth was the most important extrinsic value. This is significant in that other research with college students has found that placing a higher importance on intrinsic values over extrinsic values is related to more positive well-being and psychological adjustment (Schmuck, Kasser, & Ryan, 2000). Even further, a significant gender difference was found; female college students reported higher importance for intrinsic values than did males. This finding appears to support gender norms and stereotypes that women are instinctually more nurturing and find more intrinsic rewards in satisfying relationships and interactions with the community than do males.

Another question emerging from the literature is how emerging adult values may change across development. Some research that has looked at college students throughout their college academic career have suggested that as college students age, they tend to rate intrinsic values, particularly relationships, as more important than extrinsic values (Aquilino, 2007; Sheldon, 2004). No significant difference was found between age of the student, academic classification, and types of values thought most important in the current study; so this finding does not support the current literature. However, the current study only sampled a very specific age range, and perhaps these changes occur over a broader time span. Overall, these findings suggest that values may be relatively stable over the college years, as supports Schwartz's definition of values, but longitudinal data would be needed to determine this.

## The Role of the Family in Emerging Adult Values

Family environment is thought to be very important in identity development overall, and specifically value development, even in emerging adulthood (Aquilino, 1997; Maccoby, 1999; Simpson, 2001). However, emerging adult theorists postulate a renegotiation of family relationships during this time, as well as, the developmental task of retaining family relatedness but establishing autonomy that is not present in adolescence (Aquilino, 2006; Tanner, 2006). Demographic information and FES means in the current study reflect this developmental task. A majority of the sample (61%) were from intact families (married) that were cohesive and close. Yet, participants reported family environments that respected individual autonomy and independence. Regarding current relationships, emerging adults reported a closer, more emotionally supportive relationship with mother than father, although means and demographics suggest that emerging adults are close to both parents. These findings support theoretical and empirical literature that suggests that when individuals leave home, relationships with parents become more positive (Aquilino, 1997; Hofer et al., 2009).

Some literature suggests that as children move out of the house, they become more autonomous from their family and the importance of parent values decreased (Grolnick, Deci, & Ryan, 1997). But other literature implies that the capacity for relatedness and family influence continues and can even become more positive after emerging adults leave home (Aquilino, 2006). Similarly, some controversy exists within the literature regarding the relationship between parent values and age, with some research stating that as individuals become older, family values become less important, while other research claims that the importance of family remains stable (Knafo & Schwartz, 2009). So the current study sought to address the question about whether parents' values matter to emerging adults while taking into consideration living situation and age.



In the current study's sample, a majority (85%) of participants did not live with their parents, and no significant mean differences were found in the relationship between values and whether the student was living in the home with parents or outside of the home. Neither did age play a factor in value congruence between the perception of their parents' values and emerging adult values. In regards to value development, emerging adults are reporting similar values to those they believe their parents to hold important across college classification as well. These findings support the literature that suggests families remain influential and important to emerging adults even if they move outside of the home environment and as they age.

In adolescence, family variables such as closeness, engaging in activities together, and family structure, have been shown to mediate or predict value congruence, or the report that parent values are similar to self values (Day et al., 1992; Kasser, Ryan, Zax, & Sameroff, 1995). Findings from Walker (2010) did not support this finding in an emerging adult college student population. Therefore, it may be that these family variables play a different role in the value development of emerging adults than they do in adolescence. In the current study, a warm family relationship, family activities, and family structure were implicated in value development. Specifically, a warm relationship and family activities were found to be significantly related to how important emerging adults believe intrinsic values are to their parents. In addition, it appears that family structure is useful in helping emerging adults understand the importance fathers place on extrinsic values. Qualitative data from parents about how they have taught values to their children also implies that the family environment is pivotal in communicating what values are important to them. So the family environment appears to remain important in the value development of emerging adults but the role of these variables may be different than in adolescence.

## Emerging Adult Values and Parent Values

Many studies have assessed the importance of parent values in adolescent value development but less is known about whether parents still continue to influence their children's values into emerging adulthood (Aquilino, 2006; Tromsdorff, 2006). Regarding the question about whether parent values continue to influence emerging adults' values, results from the current study support the idea that parents play a significant role in emerging adult values. When looking at the importance of values overall, both intrinsic and extrinsic, the majority of the emerging adults in the sample report that all of the values measured are important to their parents, suggesting that emerging adults are attending to both parents' values. Emerging adults appear to see intrinsic values as more important than extrinsic values. In particular, personal growth and relationship are most important to parents and fame is the least. Also, it was found that intrinsic parent values were the best predictors of emerging adult intrinsic values and extrinsic parent values were the best predictors of emerging adult extrinsic values, which is congruent with the literature (Knafo & Schwartz, 2009; Walker, 2010). This further supports the implication that emerging adults are noticing and discriminating regarding the importance of different types of values to their parents. Results from regression analyses demonstrated that parent values were better predictors of extrinsic values than intrinsic values. Current literature may shed light onto the reason for this finding: White and Matawie (2004) measured religious values in both parents and adolescents and found that parent values were a better predictor of external morality (family and culture focus) than internal (individual focus) morality. It may be that extrinsic values provide a more explicit, culturally and developmentally relevant message which emerging adults accept as more important than messages regarding intrinsic values. For example, parents may communicate more directly about the need for the student to succeed in college to "make it" financially than they communicate about the importance of relationships. It

is possible that emerging adults are relying more on parents for guidance regarding extrinsic values than for intrinsic values. Another possibility is that there was more variance present in the participants' report of the importance of extrinsic values. The scales for both parent and emerging adult values were normally distributed, highlighting this variance, and did not need to be transformed as the intrinsic values scales were, which can sometimes reduce the statistical power of analyses

Some literature suggests that parents believe they are still “teachers” of values even after their child leaves for college although the way in which they teach values may be different than in childhood or adolescence (Hofer et al., 2009; Baker, 2004; Pagano, Hirsch, Deutsch, & McAdams, 2002); therefore, it is important to also assess what parents believe is their role in the value development of their emerging adult. Due to the small number of parents that completed the online survey in the current study, parent answers could not be included in the primary analyses; however, some qualitative information provided by parents sheds an interesting light on what strategies parents use to teach values. Each parent was asked the question, “In what ways have you taught important values to your children?” A majority of the answers included an element of teaching or leading by example or engaging in activities that promote important values and seemed to reflect how one might teach values to younger children (see Appendix D). Several of the answers from both mothers and fathers highlight this element of leading/teaching by example: “Reading books and seeing movies in early childhood that portrayed important values, talking with them about values using teachable moments...trying to be a consistent model of important values in my words and actions... My husband and I have been involved in many service activities and have taught our children to think of others, too... By setting an example for them to follow.”

These answers in many ways parallel the questions that comprise the Personal Growth indices of the FES, used in the current study to measure family activities that may communicate values. The extent that families engaged in these types of activities was related to seeing intrinsic values as important to fathers and mothers; so it appears that emerging adults also see family activities as a way in which values were taught in their homes. This finding is congruent with literature that suggests parents see themselves as “role models” and their actions as important in teaching values (Pagano, Hirsch, Deutsch, & McAdams, 2002); Knafo and Schwartz (2009) found that young adults more readily accepted their parents’ values when there was participation in activities that communicated these values.

Also, an important element to teaching values that emerged from the qualitative data appeared to be the presence of a loving family environment, as addressed by two parents: “Our children have grown up in a loving, honest household, knowing right from wrong, being disciplined and in loving home at all times...trust God, work hard, be honest, love family.” These answers appear to be centered more around intrinsic values, such as relationship and personal acceptance and growth, rather than extrinsic values, which may suggest that parents believe they are emphasizing intrinsic values more. This is consistent with reports from participants that parents place great importance on intrinsic values and demonstrates that perhaps these strategies are communicating values accurately to the emerging adult.

These answers also highlight the importance of family relationships and mirror questions addressed by the Relationships Index of the FES. The quality of family relationships and presence of emotional support did emerge as an important influence in how emerging adults’ perceived parent intrinsic values. However, emotional support in the relationship, or the current relationship between father and mother respectively did not strengthen value congruence. Therefore, relationships among family members appear to be relevant in emerging adults’

perception of parent values but do not directly influence value congruence in emerging adults. This finding is reflected in literature that suggests that for emerging adults, caring family relationships may affect how important or influential emerging adults see parents' values to be in their own value-based decision-making process (White & Matawie, 2004). Also, other research has found that the more important a child perceives a value to be to their parent, the more likely the child is to adopt that value for him or herself (Okagaki & Bevis, 1999). Therefore, family relationships may still be important in value congruence in a more indirect way by highlighting what values are important to parents. This is consistent with the quantitative findings from the current study regarding family variables and their influence on perception of parent values. Research exploring the role parents believe they play in teaching values currently to their emerging adult may be helpful in continuing to understand emerging adult value development.

#### The Role of the Parents in Emerging Adult Values

Mothers have typically received a lot of attention in the values literature, with focus on father's role only recently emerging (East, Jackson, O'Brien, 2006; Nielson, 2007). In particular, some research suggests that both fathers and mothers play an equally important role in child well-being and that poor relationships with either parent can contribute to negative outcomes in children (Rohner & Veneziano, 2001). While more recent research has begun to acknowledge the role of both father and mother, it remains somewhat unclear how those roles are similar or different (Knafo & Schwartz, 2009). In the current study, father and mother values, as well as, measures assessing the current relationship with each parent were utilized to better understand the roles each parent play in value development. The following paragraphs will explore father and mother values separately to highlight the important role each plays in value development.

### *The role of the father*

When the literature looked at fathers' roles, it has traditionally focused on the implications of the absence of the father (East, Jackson, O'Brien, 2006). However, in a 15-year longitudinal study of college-aged women, most reported a positive relationship with father, with a desire for the relationship to be even closer (Neilson, 2007). This suggests that not only is a relationship with father important, but emerging adults want their fathers to play a significant role in their lives. Findings from the current study supported this research with a little less than half of participants (46%) who reported being very or extremely close to their fathers and a strong majority (90%) said that the closeness in the relationship is about the same or better since coming to college.

Upon first inspection, fathers' values did not appear to significantly contribute to emerging adult values; rather mothers' values appeared to play the more prominent role. However, both perceived father and mother intrinsic values and father and mother extrinsic values were significantly positively correlated, so it is not accurate to say that fathers do not play a role in value formation in emerging adults, although the mother's influence may be felt more.

It also appears that particular family environment and relationship variables highlight the importance of father values. A warm family environment and family activities that communicate values are associated with emerging adults' perception of how important intrinsic values are to their fathers and overall, participants believed their fathers to place a significantly higher importance on intrinsic than extrinsic values. These findings lend support to the fact that fathers do play a role in intrinsic value formation but this role may be more impactful when all the relationships among family members are positive and when the presence of activities in the family may serve to communicate intrinsic values.

Regarding perception of fathers' extrinsic values, it appears that emerging adults see family order and structure and less cohesive families as a communicator of the importance of extrinsic values to their father. This is congruent with literature that suggests that in American culture, fathers have played a more instrumental role in the family, with focus given to how a father provides material goods and shelter for their families. Therefore, the presence of structure and order in the family may represent the importance of this provision role in a father to emerging adults. In addition, some research suggests that a more structured and controlled and family environment may be linked to the importance of extrinsic values in emerging adults (Kasser, Ryan, Zax, & Sameroff, 1995). In regards to extrinsic value congruence, it appears that father extrinsic values are more important to emerging adults when there is a more emotionally supportive relationship with father. This suggests that emerging adults may be more likely to look to father more for guidance if a supportive relationship exists. This finding is supported by Schonpflug (2001) which found that while parent relationships were more significant in childhood and adolescence, the positive quality of the relationship between father and son remained impactful into emerging adulthood. Therefore, it may be that the presence of an emotionally supportive relationship is more impactful with fathers than it is with mothers because it is less common (Nielson, 2007). The importance of the relationship between father and adolescent in value congruence is seen in the literature (Knafo & Schwartz, 2003), and it appears this finding is also supported in emerging adulthood.

#### *The role of the mother*

Research supports the important role mothers play in the identity development of their children, and a close relationship with mother is often seen as a factor in positive psychosocial outcomes for children (Neilson, 2007). This is consistent with cultural norms of the role of mother as a nurturer and predominant caretaker with primary responsibility for raising children.

Over two-thirds of participants in the current study reported a very or extremely close relationship with their mother and a strong majority (87%) said that relationship has remained about the same or improved since coming to college. In the current study, mothers have more influence than fathers on emerging adults' report of both intrinsic and extrinsic values. This is also consistent with literature and cultural norms (Aquilino, 2007), and it may be that mother plays the more predominant role as the communicator of values in the family even through emerging adulthood.

Regarding intrinsic values, a warm family environment and the presence of family activities are family variables that seem to communicate how important intrinsic values are to mothers just as these variables did with father, which is consistent with literature that suggests that the more nurturing the mother, the more important intrinsic values are to the college student (Kasser, Ryan, & Zax, 1995). Emerging adults' reports of their mothers' intrinsic values were the most important contributors to their own intrinsic values. Since intrinsic values are more relationally focused, the idea that mothers' intrinsic values are most significant to emerging adults supports the cultural norm that mothers are typically seen as nurturing and care-taking. Regarding extrinsic values, family environment variables do not help emerging adults to perceive the importance of extrinsic values to their mother. Therefore, family variables that communicate how important extrinsic values are to mother and father appear to be different. However, mothers' are influential in how important emerging adults' report extrinsic values are to them, again suggesting that the mother's role in value development is very active even continuing into emerging adulthood. This is consistent with literature that states emerging adults are reporting that mothers are important in their lives (Nielson, 2007; Rohner & Veneziano, 2001).



## Combined Parent Roles

Knafo and Schwarz (2003, 2009) found that when both parents were present in the young adults' life, parental agreement on the importance of a value became important for acceptance of parent values, and the current study supports these findings. It is important to note that over half (56%) of the participants in this study reported their parents as married and living together, therefore, the findings in the current study regarding the role of father and mother may reflect the nature of intact families. Given this, the role of mother may be supported and informed by the role of father and vice-versa. To further support this, it appears that the presence of father intrinsic values highlights mother intrinsic values and may make them more important, particularly if father and mother values differ; therefore, father values may strengthen the importance of mother values to emerging adults. This may suggest that the father plays a "support" role to mother's predominant role in shaping intrinsic values and that if values differ, it is mothers' values that are the most attended to by emerging adults; this is a new finding and has not been discussed in the literature, therefore, more questions arise concerning the impact of father on value development.

In contrast, mothers' role may become even more important in value development in non-intact families. In particular, findings from the current study suggest that emerging adults' reported a closer relationship with mother and better communication when families were not-intact. This may be due to the fact that mothers may play an even more predominant role in caretaking in a single parent home.

This suggests that while mothers and fathers play a distinct role in value development, the role of mother and the role of father are also interdependent on each other, particularly if married, living together or living apart. Findings from the current study suggest that emerging adults perceive their parents' values as more similar in intact families. Therefore, another role of

“parental unit,” or parents presenting values from a “unified front” may also be important to study in terms of emerging adult value development.

### Relationship Variables and Emerging Adult Values

Findings from the current study add to the literature regarding what is known about the importance of parents to emerging adults, specifically in regards to values. However, current theoretical research also asks about how and in what ways parents contribute to value development in emerging adulthood and if this is different than how they contribute during adolescence. Specifically, communication and a supportive relationship with parents are seen as very important predictors and/or contributors to adolescent values (Day et al., 1992; Schrod, Witt, & Messersmith, 2008). The current study sought to replicate and extend these findings with an emerging adult population. It was hypothesized that both positive family communication between all members and a supportive relationship between fathers and mothers and emerging adults would moderate or strengthen value congruence of both intrinsic and extrinsic values.

Positive family communication did not serve to strengthen value congruence between emerging adult values and perceived parent values, either intrinsic or extrinsic. The findings in the current study are not seen in the literature looking at adolescent values. In particular, White and Matawie (2004) found that quality of communication increased value congruence in adolescents. This finding is also surprising because Hofer and colleagues (2009) suggest an increase in communication via electronic devices from high school to college, but upon closer inspection, emerging adults utilized strategies to avoid conversations about certain subjects (the content of these subjects were not identified in the study). Therefore, one possible reason for the current finding is that emerging adults are more autonomous than adolescents and topics of communication with parents may be more discriminating, and therefore, not as salient in the process of parent-emerging adult value congruence. This may be due to the fact that parent

values are made known in childhood and adolescence before emerging adulthood, and so the quality of communication may not actually serve to increase acceptance of parent values in emerging adulthood because this task was accomplished in adolescence. Also, the idea that being in a college environment may open up the emerging adult to other values messages or other opportunities for value communication may decrease the importance of communication in parent-emerging adult value congruence, which is a theoretical postulation in the literature (Arnett, 2006; Erikson, 1980). This may be especially true of extrinsic values of wealth, fame, and image, as cultural influences may be particularly salient for emerging adults in these areas.

Another possible reason for the findings in the current study includes the type of communication measure used. The Family Communication scale may not have captured communication between child and parent because the questions were worded in light of communication amongst all family members; therefore, this may be one reason for the discrepant findings of this study and the literature. Using a scale that measures parent-child communication specifically for a young adult age span may account for this potential problem.

However, there is some evidence from the findings in the current study that communication is still important to emerging adult value development overall. Family communication was related to perceptions of intrinsic values being important to both fathers and mothers. Therefore, communication may serve, as did family relationships and family activities, to inform emerging adults about how important intrinsic values are to parents, which may indirectly affect value congruence. This finding is consistent with Knafo and Schwartz's research (2009) that suggested more frequent communication was likely to increase college students' accuracy of what values were important to parents. In the current study, parents' values were perceived as more similar if parents were married. Interestingly, communication was negatively correlated with father extrinsic values, and given that it decreased value

congruence overall, the role of communication appears to be different in extrinsic than intrinsic values. It appears that it is not communication that enhances extrinsic value congruence or that highlights the importance of parent extrinsic values, but rather other factors may be involved. Therefore, communication seems most important in highlighting parent intrinsic values and this may be due to the content in family communication, perhaps parents are talking with their children more about intrinsic values or it may be that communication is more impactful in developing intrinsic values which are less explicit than extrinsic values.

Emerging adults' report of an emotionally supportive relationship with father and mother did not affect value congruence either, which is different from other research findings on value development in adolescence that suggest the relationship is pivotal in value congruence (Okagaki & Bevis, 1999; White & Matawie, 2004). The fact that emotionally supportive relationships did not significantly contribute to value congruence is a surprising finding. Just as with family communication, the parent-child relationship may not be as important in the value congruence between parents and emerging adults as it is in adolescence. One reason for this finding may be that emerging adults are forming other intimate and supportive relationships that serve to inform their value system, and while relationship with parents remains important, other peer and/or romantic relationships may also become important. This thought is supported by theoretical literature that suggests a developmental task in emerging adulthood is forming intimate relationships outside of the family unit (Arnett, 2007). Also, Tanner's recentering theory (Tanner, 2006), which explores how emerging adults move into more autonomy while still retaining relatedness with parents, may help explain the current study's findings. In particular, family relationships are perceived to be dynamic and changing, or renegotiating roles at this time (Aquilino, 2006), while increased opportunities exist for other important experiences and relationships. The role of a supportive relationship in overall value development in emerging

adults seems to differ from adolescence. The quality of parental relationships may have already impacted value congruence while in adolescence. And as more focus is given to exploring other relationships in emerging adulthood, the parental relationship may not be as important to emerging adults' current thinking about values.

However, as with family communication, there is some evidence from the findings in the current study that an emotionally supportive relationship is still important to emerging adult value development overall. An emotionally supportive relationship with father served to increase the importance of father extrinsic values to emerging adults' report of their own values. It may be that an emotionally supportive relationship with father makes his role more salient regarding extrinsic values. In addition, the current study found that participants reported close relationships with both parents, even closer when families were intact. Research supports the idea that close relationships may improve the accuracy with which emerging adults' perceive their parents' values (Okagaki & Bevis, 1999).

Given the findings of the current study, parent values are still important to emerging adult values, but certain family variables may be more influential to value congruence in adolescence than it is in emerging adulthood. This is consistent with the findings from Walker (2010) in that family variables did not predict value congruence in parents and college females either. Rather communication and emotional support, just as family environment, family activities, and family structure, serve to inform emerging adults' what values are important to parents. Therefore, it appears that parents play a different role in value development in emerging adults than in adolescents.

### Implications

An important implication of this study's findings is that values are important to emerging adults. Both intrinsic and extrinsic values are important to college students; however, more

importance is placed on intrinsic values. In particular, personal growth or self-acceptance is the most important intrinsic value. Some gender differences were seen in that females reported placing a higher importance on intrinsic values than did males. Given that values are pivotal in personal growth and success, these findings highlight the importance of values-based interventions and programming for emerging adults in higher education institutions. For example, academic curriculum development emphasizing the importance of values in career choice, outreach interventions within a counseling center emphasizing the importance of values in decision-making or individual counseling focusing on identity development and self-acceptance would be relevant to college students and useful in promoting academic and personal development.

Another important implication of this study's findings is the role of age on the development of a value system. Some research suggests that over time, the importance of extrinsic values decreases and more emphasis and importance is placed on relational values. Although the current study is not longitudinal, no significant difference was found in the importance of different types of values at different ages. Rather, differences were seen most significantly in gender, with female participants giving higher importance to intrinsic than extrinsic values. These findings can be applied to not only emerging adult development theories but also theories of gender development. Clinically, these findings can aid therapists in understanding value development as it applies to gender in college students.

Further, after emerging adults enter college and gain more autonomy and independence, they still rated the importance of values for themselves similarly to how they believe their parents would rate it. This showed that parents continue to influence emerging adult development. Therefore, the study supports the importance of a greater knowledge of parents' value systems when counseling college students. In particular, it appears that mothers contribute

to intrinsic and extrinsic values, while fathers contribute to extrinsic values if the emerging adult perceives a positive relationship. Therefore, the role of the mother and father is unique in regards to their contribution to emerging adults' identity and value development. Regarding theory, the idea that mothers and fathers play a differing but equally important role in value development can further our knowledge of how values are transmitted. The finding can also be applied to parent training programs to help parents understand the influence and impact they play on the types of values their children adopt.

Family variables (i.e. family environment, family activities, and family structure) may still play a role in communicating to emerging adults which values are important to parents, just as they did in adolescence. Family therapy and assessment techniques may benefit from including a measure or discussion of family values and ways they are expressed in the home environment to gain a fuller understanding of family dynamics and interaction patterns. In addition, these findings may help parents understand how to communicate to their emerging adult which values are important to them.

A surprising finding is that family communication and emotionally supportive relationships between parents and emerging adults did not contribute to value congruence as these variables have been thought to contribute to adolescent value development. This implies that either other factors are involved in the impact of parents on emerging adult value development or that parents play a more active role in the value development of adolescents and their values remain just as important to the adolescent who continues into emerging adulthood. Implications suggest that the role of the parents shift or change in emerging adulthood and this is important to understand when counseling emerging adults, particularly in regards to identity development, and when counseling families, particularly in regards to making life and family transitions smoother and less stressful.

## Limitations

One limitation of this research is its generalizability to minority ethnic and religious populations. The sample was 61.5% Caucasian and 49.7% Protestant. In addition, most of the participants' parents were still married. While these percentages are similar to other samples in college student literature, with the exception of specifically focused studies in regards to ethnicity or religion, generalizability remains a limitation of the current study.

Another limitation of the research is the reliance upon self-report, which has the potential to lead to biases in reporting. In particular, the mean for intrinsic values was relatively high compared to other studies measuring values and could be based on issues of social desirability that plague self-report measures in general but also measures of values.

Although newer theories about values suggest that it is the perception of parent values by the emerging adult that is most important in value development, it may have been helpful to attain actual parent values in order to compare actual and perceived parent values. This information would have allowed the researcher to measure accuracy in value perception which is another key piece to value development according to Grusec and Goodnow's theory of value acquisition. It was difficult to obtain the needed number of responses from parents. Some parent email addresses provided by student participants were incomplete or inaccurate, limiting the number of surveys that were able to be sent out to parents. It may be helpful to include some type of compensation for parents in the future as an incentive to complete questionnaires.

Internal consistency was also an issue for some of the scales. The reliability of a scale is considered to be adequate for research purposes if it has a Cronbach's alpha above .7 (Tabachnick & Fidell, 2007). Cronbach's alpha coefficients for perceived mother's extrinsic values and the system maintenance index were in the upper .60's. Lastly, violations of multiple regression assumptions (i.e. multicollinearity, outliers, normality, linearity, and



homoscedasticity) were checked and transformations were made for problems with skewed distributions on emerging adult intrinsic values, father and mother perceived intrinsic values, and the father and mother QRI. While all variables were corrected if needed, all the scales were not exactly normally distributed which could cause a bias in the results (Tabachnick & Fidell, 2007).

### Future Directions

The current study found no mean difference between age and type of value, intrinsic and extrinsic. This was somewhat contradictory to other literature that suggested that extrinsic values decrease over time and the importance of relationships and intrinsic values increases over the college career. Rather, the current study suggests that perhaps values stay consistent fairly consistent during this developmental period. Longitudinal research with this population may be helpful to determine if values do in fact remain stable over time.

Findings from the current study suggest that the family still influences emerging adults' values. Further, certain family environment variables appear to be connected to which type of value emerging adults see as important to their parents. Future research may want to identify which family environment variables parents see as important in the process of communicating values and what strategies they use to teach values during this developmental period to see if they differ from strategies used to teach values in childhood. Given the quantitative findings from the current study, variables that measure how parents communicate important values whether verbally or non-verbally may be useful. In addition, asking emerging adults if and how parents are still teaching values would increase knowledge about what family factors contribute to value congruence in emerging adulthood.

Another possible direction for future research includes examining more closely the role of the father and mother in emerging adulthood. In particular, fathers appear to play a role but it

does not seem as impactful as mothers' role in value development. Perhaps further inquiry into the role of fathers and mothers and its relation to marital status would be helpful in understanding the role of the family in the value development of emerging adults.

A surprising finding from the current study was that quality of communication and a supportive relationship with parents did not contribute to value congruence. This was different than findings from adolescent value development research, and potential reasons for this may lie in the developmental period and tasks that accompany individuals 18-26 years old, or emerging adults, or it these findings could represent a measurement issue. Further research examining how or if these two family variables impact value development would be helpful to expand the literature in both family psychology and developmental psychology because at the present time, most research that postulates a difference between adolescence and emerging adulthood is theoretical.

Given that these variables were not influential in value congruence between emerging adults and parents, future research may want to explore other relationships or contexts that are influential to emerging adult value development, as the role of the family is not the sole source of value development, particularly during this developmental period. It would be interesting to identify how emerging adults believe the role of the family in developing values has changed or remained the same as they have left the home and what other factors now contribute to their values.

Lastly, one purpose of values is that they serve as guiding principles in people's lives to make decisions (Schwartz, 1992). Given this, a next step for this research topic could be identifying behaviors that emerging adults engage in that may or may not be congruent with their values system. Exploring not only what values are important to emerging adults but how these values are acted out as applied to individual goals and in life experiences would increase

knowledge about emerging adult value development. Behaviors associated with values or making choices consistent with values may be influenced by parents based on the findings of this study and other literature. In regards to family influence, it may be helpful to understand what role the emerging adults believe the parent plays in their decision making process to make choices consistent with their reported value system.

### Conclusion

When Ellen Maurer, associate director of Ball State University Counseling Center, received 600 email responses from students regarding the importance of the relationship with their parents and its impact on their values, it sent a message to parents: students are still listening. Results from the current study supported this anecdotal evidence and findings show that parent values remain important to emerging adults throughout college, regardless of age or living situation. While some research characterizes emerging adulthood as a time of separation and individuation, value development in emerging adults is still very connected to parent values but the family variables that influence values in adolescence appear to be different in emerging adulthood. It is worthwhile to continue examining the influence of family on emerging adults and their values.

Table 1

*Frequencies for Demographics*

Variables	Frequency	Percent
Age	Total Sample $n = 200$ $M = 20.24$ $SD = 1.82$	
18	29	14.5
19	57	28.5
20	40	20.0
21	31	15.5
22	21	10.5
23	8	4.0
24	9	4.5
25	1	.5
26	4	2.0
Gender		
Male	101	50.5
Female	95	47.5

*table continues*

Table 1 (*continued*).

Variables	Frequency	Percent
No answer	4	2.0
Year in School		
Freshman	61	31.0
Sophomore	54	27.4
Junior	44	22.3
Senior	37	18.8
Graduate	0	0
Other	1	.5
Ethnicity/Race		
African American	42	21.0
Asian	13	6.5
Caucasian	123	61.5
Hispanic	14	7.0
Middle Eastern	1	.5

*table continues*

Table 1 (*continued*).

Variables	Frequency	Percent
Native American	0	0
Biracial/Multiracial	5	2.5
Other	2	1.0
Religion		
Protestant	99	49.7
Catholic	30	15.1
Jewish	0	0
Muslim	4	2.0
Eastern Religions	1	.5
None	36	18.1
Other	29	14.6
Job		
>35 hours	9	4.5
25-35 hours	29	14.5

*table continues*

Table 1 (*continued*).

Variables	Frequency	Percent
15-24 hours	38	19.0
Less than 15 hours	19	9.5
Not employed	105	52.5
Involved in Romantic Relationship		
Yes	97	49.0
No	101	51.0
Length of Relationship		
< 3 months	23	20.9
3-6 months	21	19.1
7 – 12 months	12	10.9
1 – 2 years	22	20.0
> 2 years	32	29.1
Current Living Situation		
With both parents at parents' home	16	8.0

*table continues*

Table 1 (*continued*).

Variables	Frequency	Percent
With one parent at parent's home	10	5.0
Alone in house/apt	13	6.5
With others in house/apt	83	41.7
Residence hall	77	38.7
Closeness to MOTHER		
Not at all	5	2.5
Not very	9	4.5
Somewhat	45	22.6
Very	84	42.2
Extremely	56	28.1
Change in Closeness to MOTHER since college		
Much worse	1	.5
A little worse	22	11.1
About the same	81	40.9

*table continues*



Table 1 (*continued*).

Variables	Frequency	Percent
A little better	60	30.3
Much better	34	17.2
Closeness to FATHER		
Not at all	23	11.7
Not very	29	14.8
Somewhat	53	27.0
Very	66	33.7
Extremely	25	12.8
Change in Closeness to FATHER since college		
Much worse	5	2.5
A little worse	14	7.1
About the same	102	51.5
A little better	49	24.7
Much better	28	14.1

*table continues*

Table 1 (*continued*).

Variables	Frequency	Percent		
<b>Biological parents</b>				
Married, living together	112	56.0		
Married, living apart	11	5.5		
Divorced, mother remarried	12	6.0		
Divorced, father remarried	17	8.5		
Divorced, both remarried	7	3.5		
Divorced, neither remarried	15	7.5		
Both deceased	0	0		
Mother deceased	1	.5		
Father deceased	1	5.5		
Never married	11	5.5		
Other	3	1.5		
Parent's Education Level	Mother Frequency	Mother Percent	Father Frequency	Father Percent
< High school degree	18	9.0	20	10.2

*table continues*

Table 1 (*continued*).

Variables	Frequency		Percent	
Parent's Education Level	Mother	Mother	Father	Father
	Frequency	Percent	Frequency	Percent
High school degree	31	15.5	40	20.3
Vocational/Trade School degree	2	1.0	4	2.0
Some college	49	24.5	35	17.8
Jr./Community college degree	14	7.0	8	4.1
College degree	60	30.0	57	28.9
Some graduate courses	0	0	2	1.0
Master's degree	18	9.0	14	7.1
Professional degree (M.D., Ph.D., etc.)	6	3.0	12	6.1
Unknown	2	1.0	5	2.5

Table 2  
*Means, Standard Deviations, Ranges for All Variables*

Variable	<i>M</i>	<i>SD</i>	Possible Range	Actual Range
Mother Intrinsic Values	3.97	0.78	1-5	1.00-5.00
Father Intrinsic Values	3.62	0.94	1-5	1.00-5.00
Mother Extrinsic Values	2.69	0.81	1-5	1.00-5.00
Father Extrinsic Values	2.78	0.98	1-5	1.00-5.00
EA Intrinsic Values	5.98	0.80	1-7	2.47-7.00
EA Extrinsic Values	4.24	1.17	1-7	1.33-7.00
FCS	35.56	7.48	0-50	12.00-50.00
Mother Emotional Support	3.18	.67	1-4	1.00-4.00
Father Emotional Support	2.78	.87	1-4	1.00-4.00
Relationships Index	5.66	1.81	0-9.00	0-9.00
Personal Growth Index	5.15	1.57	0-9.00	0-9.00
System Maintenance Index	4.91	1.66	0-9.00	0-9.00
Mother Total Importance	3.33	.59	1-5	1.00-5.00
Father Total Importance	3.20	.72	1-5	1.00-5.00

*Note:* Variables have been rounded to two decimal places. Variables represent the following scales: Perceived Mother/Father Values (condensed version of Aspirations Index), Emerging Adult (EA) Values (Aspirations Index Importance Subscale), FCS (Family Communication Scale), Mother/Father Emotional Support (Quality of Relationships Inventory, Support and Depth subscales), Relationships Index (Cohesion, Expressiveness, reversed-scored Conflict scales on Family Environment Scale [FES]), Personal Growth Index (Intellectual-Cultural, Active-Recreational, Moral-Religious scales on the FES), System Maintenance Index (Control and Organization scales on the FES), and Mother/Father Total Importance Scale (average of the sum of 6 AI subscales, representing both Intrinsic and Extrinsic values).

Table 3  
*Means, Standard Deviations, and Ranges of Transformed Variables*

Variable	<i>M</i>	<i>SD</i>	Possible Range	Actual Range
Mother Intrinsic Values	.28	.16	1-15	.00-.70
Father Intrinsic Values	1.51	.30	1-15	1.00-2.24
EA Intrinsic Values	.56	.18	1-7	.18-1.00
Mother Emotional Supp	.37	.21	1-4	.00-.85
Father Emotional Supp	1.80	.46	1-4	1.00-2.65
Mother Total Importance	1.62	.18	1-4	1.00-2.24
Father Total Importance	1.66	.22	1-4	1.00-2.24

*Note:* Variables have been rounded to two decimal places. These variables were transformed to compensate for the significant negative skew of the distribution. In particular, Mother Intrinsic Values, Mother Emotional Support, and Father and Mother Total Importance Scale were transformed using a Lg10 transformation; Father Intrinsic Values and Father Emotional Support were transformed using a square root transformation; and EA Intrinsic Values was transformed using an inverse transformation. Decisions regarding transformations were based on the significance of the skewness and its' standard error as suggested by Tabachnick and Fidell (2004).

Table 4  
*Means, Standard Deviations, and Ranges of 6 AI Subscales for Emerging Adults*

Variable	<i>M</i>	<i>SD</i>	Possible Range	Actual Range
Extrinsic Values				
Wealth	4.57	1.35	1-7	1.40-7.00
Image	3.69	1.57	1-7	1.00-7.00
Fame	4.47	1.18	1-7	1.20-7.00
Intrinsic Values				
Personal Growth	6.28	0.83	1-7	2.40-7.00
Relationships	5.83	0.86	1-7	2.60-7.00
Community Contribution	5.83	1.12	1-7	2.20-7.00

Table 5  
*Means, Standard Deviations, and Ranges of 9 FES Subscales*

Variable	<i>M</i>	<i>SD</i>	Possible Range	Actual Range
Cohesion	6.11	2.28	0-9	0-9
Expression	5.34	2.10	0-9	1-9
Conflict	3.47	2.36	0-9	0-9
Independence	6.53	1.82	0-9	1-9
Achievement	6.08	1.68	0-9	1-9
Intellectual	5.01	2.07	0-9	0-9
Active-Recreational	4.88	2.08	0-9	0-9
Moral-Religious	5.58	2.39	0-9	0-9
Organization	5.42	2.13	0-9	0-9
Control	4.39	2.28	0-9	0-9

Table 6  
*Correlations for All Variables and Scales' Alpha Coefficients*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 M_Intrinsic	(.71)	.27**	.09	.06	.22**	.02	.55**	.08	.24**	.24**	.20*	.12	.73**	.22**
2 F_Intrinsic		(.77)	.12	.12	.03	.01	.21**	.54**	.29**	.25**	.23**	.14*	.26**	.74**
3 M_Extrinsic			(.66)	.50**	-.00	.49**	-.01	-.12	.03	-.05	.05	.14	.75**	.41**
4 F_Extrinsic				(.70)	.01	.34**	-.10	-.13	-.16*	-.24**	.09	.20**	.38**	.76**
5 EA_Intrinsic					(.89)	.31**	.07	.02	.05	.02	.03	-.10	.14*	.02
6 EA_Extrinsic						(.91)	-.08	-.05	-.10	-.12	.01	.02	.34**	.24**
7M_EmotSupp							(.94)	.29**	.33**	.29**	.03	.09	.36**	.07
8 F_EmotSupp								(.95)	.35**	.35**	.09	.08	-.03	.26**
9 FCS									(.90)	.67**	.29**	.11	.18*	.08
10 FES_Reltn										(.83)	.34**	.03	.13	.00
11 FES_PersGro											(.70)	.30**	.17*	.21**
12FES_SysMain												(.65)	.16*	.23**
13 M_Total Imp													(.65)	.43**
14 F_Total Imp														(.60)

Note: \* =  $p < .05$ . \*\* =  $p < .001$ . Cronbach's alpha coefficients are reported on the first diagonal for the variables. Values have been rounded to two decimal places.



Table 7  
Correlations for All Scales after the Transformation of Five Scales

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 M_Intrinsic	--	.32**	.08	.08	.25**	.03	.47**	.09	.25**	.24**	.23*	.12	.69**	.26**
2 F_Intrinsic		--	.13	.12	.07	.02	.24**	.53**	.31**	.27**	.25**	.14*	.30**	.72**
3 M_Extrinsic			--	.50**	-.04	.48**	-.04	-.11	.03	-.05	.05	.14	.77**	.44**
4 F_Extrinsic				--	.09	.34**	-.11	-.13	-.16*	-.24**	.09	.20**	.40**	.77**
5 EA_Intrinsic					--	.37**	.07	.00	.04	.04	.05	-.01	.20**	.11
6 EA_Extrinsic						--	-.07	-.03	-.10	-.12	.01	.02	.37**	.27**
7M_EmotSupp							--	.36**	.40**	.35**	.07	.01	.30**	.09
8 F_EmotSupp								--	.39**	.37**	.11	.09	-.02	.23**
9 FCS									--	.67**	.29**	.11	.18**	.09
10 FES_Reltn										--	.34**	.03	.12	.00
11 FES_PersGro											--	.30**	.17*	.22**
12FES_SysMain												--	.17*	.22**
13 M_Total Imp													--	.49**
14 F_Total Imp														--

Note: \* =  $p < .05$ . \*\* =  $p < .001$ . Transformations were performed on the following variables: Mother Intrinsic Values, Father Intrinsic Values, Emerging Adult Intrinsic Values, and Father and Mother Emotional Support. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variables. Values have been rounded to two decimal places.

Table 8  
*Correlations for All Variables for Intact and non-Intact Families*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 M_Intrinsic	--	<b>.44**</b>	.04	.06	<b>.25**</b>	-.03	<b>.33**</b>	.16	<b>.29**</b>	<b>.26**</b>	<b>.18*</b>	-.05	<b>.59**</b>	<b>.33*</b>
2 F_Intrinsic	.12	--	.13	-.01	-.02	.04	<b>.31**</b>	<b>.49**</b>	<b>.46**</b>	<b>.35**</b>	<b>.36**</b>	.07	<b>.36**</b>	<b>.63**</b>
3 M_Extrinsic	.15	.14	--	<b>.59**</b>	.12	<b>.56**</b>	-.15	-.08	.01	-.12	.06	.11	<b>.82**</b>	<b>.55**</b>
4 F_Extrinsic	.11	.27	<b>.32**</b>	--	.18	<b>.47**</b>	.23	<b>.26**</b>	<b>-.21*</b>	<b>-.34**</b>	.01	.14	<b>.50**</b>	<b>.77**</b>
5 EA_Intrinsic	<b>.23*</b>	.07	-.10	-.06	--	<b>.45**</b>	.03	-.09	-.08	-.13	-.03	-.09	<b>.24**</b>	.17
6 EA_Extrinsic	.10	-.03	<b>.30**</b>	.13	.21	--	<b>-.19*</b>	-.17	-.13	<b>-.25*</b>	-.07	-.06	<b>.44**</b>	<b>.41**</b>
7 M_EmotSupp	<b>.54**</b>	.02	.10	.01	.11	.04	--	<b>.55**</b>	<b>.49**</b>	<b>.52*</b>	.15	-.04	.10	-.03
8 F_EmotSupp	.12	<b>.48**</b>	-.15	.01	.04	.15	<b>-.27*</b>	--	<b>.63**</b>	<b>.54**</b>	<b>.25**</b>	.05	.03	.10
9 FCS	.18	.08	.06	-.07	<b>.25*</b>	-.04	.07	.01	--	<b>.70**</b>	<b>.29**</b>	.06	<b>.19*</b>	.13
10 FES_Reltn	<b>.23*</b>	.16	.07	-.08	.12	.12	.22	.22	<b>.62**</b>	--	<b>.26**</b>	-.17	.06	-.05
11 FES_PersGro	<b>.34**</b>	.16	.05	.22	.22	<b>.62**</b>	-.00	-.04	<b>.29**</b>	<b>.45**</b>	--	<b>.24**</b>	.13	<b>.23*</b>
12 FES_SysMain	<b>.27*</b>	.17	.18	<b>.29*</b>	-.03	.14	.19	.04	.17	<b>.32**</b>	<b>.42**</b>	--	.05	.15
13 M_Total Imp	<b>.79**</b>	.16	<b>.71**</b>	<b>.27*</b>	.06	<b>.25*</b>	<b>.46**</b>	-.20	.16	.21	<b>.26*</b>	<b>.29*</b>	--	<b>.63**</b>
14 F_Total Imp	-.15	<b>.79**</b>	<b>.32**</b>	<b>.80**</b>	-.00	.06	.03	<b>.28*</b>	-.00	.05	<b>.23*</b>	<b>.28*</b>	<b>.29*</b>	--

Note: \* =  $p < .05$ . \*\* =  $p < .001$ . Correlations for Intact families are reported above the diagonal and correlations for non-Intact families are reported below the diagonal. Values have been rounded to two decimal places. Significant correlations portrayed with bold-type font.

Table 9

*Regression Examination of Perceived Parent Values and Emerging Adult Intrinsic Values – Hypothesis I-B*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	Incr. in R2	FΔ	FΔ Sig.	r	β	t Sig.
<u>Control Block</u>											
Total Importance	.19	.04	-.03	3.60	.03*						
Father's									.11	.13	.25
Mother's									.19	-.04	.74
<u>Perceived Parent Values</u>											
Intrinsic	.27	.07	.05	3.65	.01*	.04	3.61	.03*			
Father's									.07	-.10	.34
Mother's									.25	.28	.01*

\* p < .05. \*\* p < .01. Zero-order correlations are represented by "r". Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. β values reported in the table are for the entire model. CONTROL BLOCK: Total Importance Father: Model 1 β = -.03, Total Importance Mother: Model 1 β = .17\*.

Table 10

*Regression Examination of Perceived Parent Values and Emerging Adult Intrinsic Values Moderated by the FCS – Hypothesis I-C*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	Incr. in R2	FΔ	FΔ Sig.	r	B	β Sig.	t
<u>Control Block</u>	.19	.04	.03	3.60	.03*							
Total Importance												
Father									.11	.02	.13	.27
Mother									.19	-.01	-.04	.72
<u>Moderator Block</u>	.27	.07	.05	2.91	.02*	.04	2.40	.07				
Intrinsic												
Father									.07	-.02	-.10	.34
Mother									.25	.05	.28	.01*
FCS									.05	.00	.01	.93
<u>Interaction Term Block</u>		.27	.07	.04	2.13	.04*	.00	.23				
Father Intrinsic x FCS									.01	4.9 <sup>-5</sup>	.00	1.0
Mother Intrinsic x FCS									.04	.01	.05	.51

\*  $p < .05$ . \*\*  $p < .01$ . Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. The Control Block and Independent & Moderator Block beta values are given for the entire model. CONTROL BLOCK: Total Importance Father:  $\beta = .03$ , Total Importance Mother:  $\beta = .17^*$ ; MODERATOR BLOCK: Perceived Father Intrinsic Values:  $\beta = -.10$ , Perceived Mother Intrinsic Values:  $\beta = .28^*$ , FCS:  $\beta = .01$ .

Table 11

*Regression Examination of Perceived Mother Intrinsic Values and Emerging Adult Intrinsic Values Moderated by Parent Emotional Support – Hypothesis I-D*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	Incr. in R2	FΔ	FΔ Sig.	r	B	β	t Sig.
<u>Control Block</u>	.19	.04	.03	3.60	.03*							
Total Importance												
Father									.11	.01	.08	.52
Mother									.19	.00	.00	1.0
<u>Moderator Block</u>	.27	.07	.04	2.47	.03*	.04	1.88	.12				
Intrinsic												
Father									.07	-.02	-.10	.44
Mother									.25	.06	.32	.00**
F_Emoional Support									-.00	.00	-.02	.86
M_Emoional Support									.07	.00	-.01	.95
<u>Interaction Term Block</u>	.31	.10	.06	2.53	.01*	.03	2.58	.08				
Father Intrinsic x												
F_Emoional Support									-.03	-.01	-.07	.36
Mother Intrinsic x												
M_Emoional Support									.07	.03	.18	.03*

\* p < .05. \*\* p < .01. Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. The Control Block and Independent & Moderator Block beta values are given for the entire model. CONTROL BLOCK: Total Importance Father: β = .03, Total Importance Mother: β = .17\*; MODERATOR BLOCK: Perceived Father Intrinsic Values: β = -.10, Perceived Mother Intrinsic Values: β = .30\*, F\_Emoional Support: β = -.02, M\_Emoional Support: β = -.05.

Table 12

*Regression Examination of Perceived Parent Values and Emerging Adult Extrinsic Values – Hypothesis II-B*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	R <sup>2</sup> Δ	FΔ	FΔ Sig.	r	β	t Sig.
<u>Control Block</u>											
Total Importance	.38	.15	.14	16.49	.00**						
Father's									.26	-.07	.52
Mother's									.37	-.01	.89
<u>Perceived Parent Values</u>											
Extrinsic	.50	.25	.23	15.90	.00**	.10	13.24	.00**			
Father's									.34	.19	.07
Mother's									.48	.42	.00**

\* p < .05. \*\* p < .01. Zero-order correlations are represented by "r". Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. β values reported in the table are for the entire model. CONTROL BLOCK: Total Importance Father: Model 1 β = .12, Total Importance Mother: Model 1 β = .31\*\*.

Table 13

*Regression Examination of Perceived Parent Values and Emerging Adult Extrinsic Values Moderated by the FCS – Hypothesis II-C*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	Incr. in R2	FΔ	FΔ Sig.	r	B	β	t Sig.
<u>Control Block</u>	.38	.15	.14	16.49	.00**							
Total Importance												
Father									.27	-.04	-.03	.77
Mother									.37	-.02	-.02	.85
<u>Moderator Block</u>	.50	.25	.23	12.99	.00**	.11	9.26	.00**				
Extrinsic												
Father									.34	.16	.14	.20
Mother									.48	.48	.41	.00**
FCS									-.09	-.08	-.07	.34
<u>Interaction Term Block</u>		.51	.26	.23	9.36	.00**	.00	.48	.62			
Father Extrinsic x FCS									.05	-.02	-.02	.83
Mother Extrinsic x FCS									.09	.08	.07	.36

\* p < .05. \*\* p < .01. Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. The Control Block and Independent & Moderator Block beta values are given for the entire model. CONTROL BLOCK: Total Importance Father: β = .12, Total Importance Mother: β = .31\*\*; MODERATOR BLOCK: Perceived Father Extrinsic Values: β = .15, Perceived Mother Extrinsic Values: β = .40\*, FCS: β = -.08.

Table 14

*Regression Examination of Perceived Father Extrinsic Values and Emerging Adult Extrinsic Values Moderated by Parent Emotional Support – Hypothesis II-D*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	Incr. in R <sup>2</sup>	FΔ	FΔ Sig.	r	B	β	t Sig.
<u>Control Block</u>	.38	.15	.14	16.49	.00**							
Total Importance												
Father									.27	-.11	-.10	.45
Mother									.37	.06	.05	.67
<u>Moderator Block</u>	.50	.25	.23	10.79	.00**	.12	6.93	.00**				
Extrinsic												
Father									.34	.28	.24	.04*
Mother									.48	.43	.36	.00**
F_Emoional Support									-.03	.09	.07	.37
M_Emoional Support									-.06	-.07	-.06	.46
<u>Interaction Term Block</u>	.51	.26	.23	8.40	.00**	.01	1.18	.31				
Father Extrinsic x												
F_Emoional Support									.08	.10	.10	.20
Mother Extrinsic x												
M_Emoional Support									.12	.03	.03	.68

\* p < .05. \*\* p < .01. Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable. The Control Block and Independent & Moderator Block beta values are given for the entire model. CONTROL BLOCK: Total Importance Father: β = .12, Total Importance Mother: β = .31\*\*; MODERATOR BLOCK: Perceived Father Extrinsic Values: β = .24\*, Perceived Mother Extrinsic Values: β = .38\*, F\_Emoional Support: β = .09, M\_Emoional Support: β = -.06.



Table 15

*Regression Examination FES Relationship and Personal Growth Variables and of Perceived Father Intrinsic Values – Hypothesis II*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	r	β	t Sig.
<u>Family Environment Scale</u>								
FES Indices	.31	.10	.09	10.46	.00**			
Relationship						.26	.20	.01*
Personal Growth						.25	.19	.01*

\* p < .05. \*\* p < .01. Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable.

Table 16

*Regression Examination FES Relationship and Personal Growth Variables and of Perceived Mother Intrinsic Values – Hypothesis II*

Block Variable	R	R <sup>2</sup>	Adj. R <sup>2</sup>	F	F Sig.	r	β	t Sig.
<u>Family Environment Scale</u>								
FES Indices	.29	.08	.07	8.78	.00**			
Relationship						.24	.18	.01*
Personal Growth						.23	.17	.02*

\* p < .05. \*\* p < .01. Zero-order correlations are represented by “r”. Transformations were performed on the following variables: Emerging Adult Intrinsic Values, Father Intrinsic Values, Mother Intrinsic Values, Father and Mother Emotional Support and Father and Mother Total Importance. Reflections were performed and therefore signs have been changed when appropriate to reveal the conceptual meaning of the variable.

APPENDIX A

LISTS OF VALUES FREQUENTLY CITED IN THE LITERATURE

<b>Spranger/Allport</b>	<b>Rokeach –</b>	<b>Terminal</b>	<b>Instrumental</b>
Theoretical		Comfortable life	Ambitious
Economic		Exciting life	Broad-minded
Aesthetic		Sense of accomplishment	Capable
Social		World at peace	Cheerful
Political		World of beauty	Clean
Religious		Equality	Courageous
		Family security	Forgiving
		Freedom	Helpful
		Happiness	Honest
		Inner harmony	Imaginative
		Mature love	Independent
		National security	Intellectual
		Pleasure	Logical
		Salvation	Loving
		Self-respect	Obedient
		Social recognition	Polite
		True friendship	Responsible
		Wisdom	Self-controlled

<b>Schwartz Value Types</b>	<b>Aspirations Index (AI) Deci &amp; Ryan – SDT Theory</b>
Power	Wealth
Achievement	Fame
Hedonism	Image
Stimulation	Meaningful Relationships
Self-Direction	Personal Growth
Universalism	Community Contributions
Benevolence	
Tradition	
Conformity	
Security	

<b>Super's Work Values</b>	<b>Dawis &amp; Lofquist Work Values</b>
Utilitarian (i.e. authority, prestige, achievement)	Achievement
Individualistic (i.e. autonomy, creativity)	Status
Self-Actualization (i.e. personal growth, altruism)	Autonomy
Social (i.e. social interaction, relations)	Altruism
Adventurous (i.e. risk, physical activity)	Comfort
	Safety

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**Career Decision Making Inventory- Work Values**

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Creativity	Physical Activity
Leadership	Independence
Variety	Prestige
Good Salary	Risk
Outdoor Work	Job Security
Work with your Hands	Work with your Mind
High Achievement	Work with People

---

**Career Occupational Preference System – COPES Work Values**

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Investigative vs. Accepting  
Practical vs. Carefree  
Independence vs. Conformity  
Leadership vs. Supportive  
Orderliness vs. Flexibility  
Recognition vs. Privacy  
Aesthetic vs. Realistic  
Social vs. Reserved

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**Jackson's Personality Research Form**

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Achievement	Play
Affiliation	Social Recognition
Aggression	Understanding
Autonomy	Infrequency
Dominance	Abasement
Endurance	Change
Exhibition	Cognitive Structure
Harm Avoidance	Defendence
Impulsivity	Sentience
Nurturing	Succorance
Order	Desirability

APPENDIX B  
CONSENT FORM

## CONSENT TO PARTICIPATE IN RESEARCH

### Families & Futures Study

You are being asked to participate in a study of the ways family influence young adult's development and ideas about the future.

### YOUR PARTICIPATION

If you agree to participate, the time commitment will be 1½ to 2 hours. You will fill out questionnaires asking about your family, how your life is going, and your ideas about the future. We know that families are important and that every family is different. We are not asking for this information to judge you or your family, but because you can help us learn more about the many roles that families play in young adult development.

### CONFIDENTIALITY

To safeguard your privacy your consent form will be separated from the questionnaires. Only the researchers will see your specific responses and your name will not be on any of the materials. All of your responses will be kept confidential. Only summarized data will be reported concerning the study. Please feel free to ask questions at any time.

### BENEFITS

Possible benefits of the study are that it may help you think about where you are in your life and your ideas about the future, including ideas about career and relationships in your life. Per your course's description, you will be given extra credit for your participation. Your participation will help us understand more about families and young adult development, and what we learn will eventually help parents, young adults, and those who work with young adults and families.

### POSSIBLE RISK

The risks from participating in this study are considered minimal. Some questions may address information you feel is personal. It could be uncomfortable to disclose this information, or make you more aware of concerns that you have, or you may find that it doesn't bother you at all. If you have any concerns or problems please let the researchers know at once. They will be prepared to help you find appropriate assistance. We believe the potential benefits outweigh any minimal risk.

### VOLUNTARY PARTICIPATION/WITHDRAWAL

Your participation in this study is voluntary. You may decide not to participate and you can discontinue participation at any time. Should you decide not to participate or discontinue participation, there will be no penalty or loss of benefits to which you would otherwise be entitled.

If you have any questions or concerns, feel free to contact us.  
Amber Wright, M. S. Vicki L. Campbell, PhD  
Graduate Student Associate Professor of Psychology  
University of North Texas University of North Texas  
Email: [amberwalker@my.unt.edu](mailto:amberwalker@my.unt.edu) (940) 565-2671



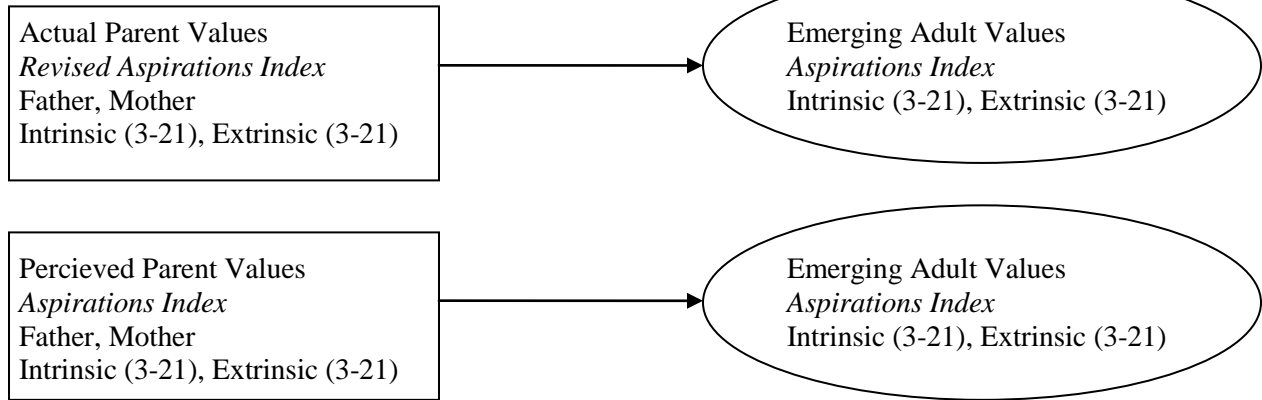
Email: VLC@unt.edu

If you are willing to participate, please sign the consent on the following page.

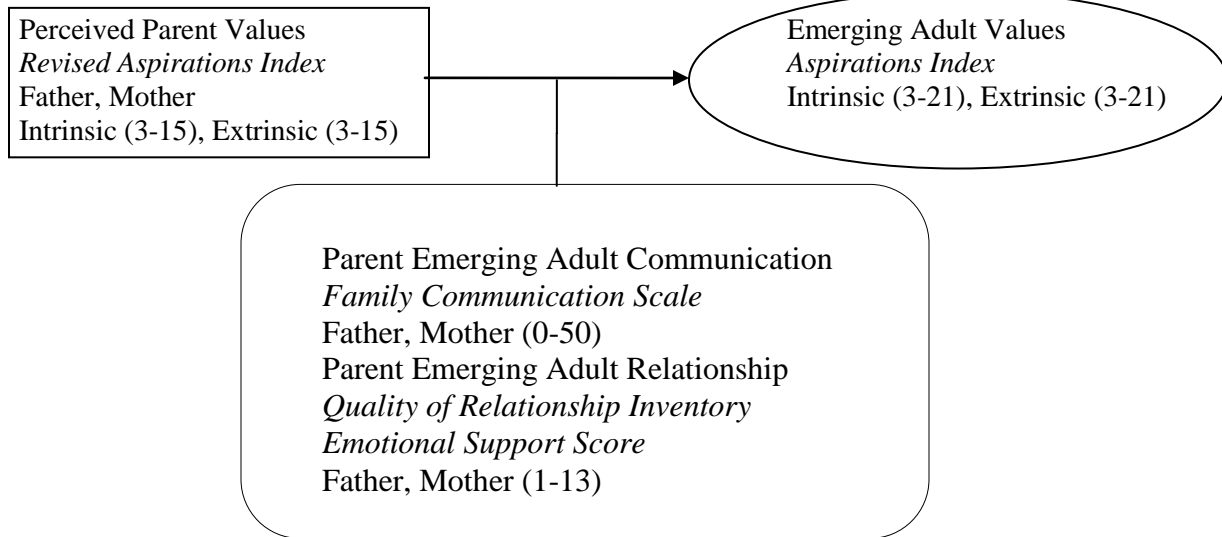
This study has been reviewed and approved by the UNT Committee for the Protection of Human Subjects  
(940 565-3940).

APPENDIX C  
PICTORIAL GRAPH OF STATISTICAL TESTS

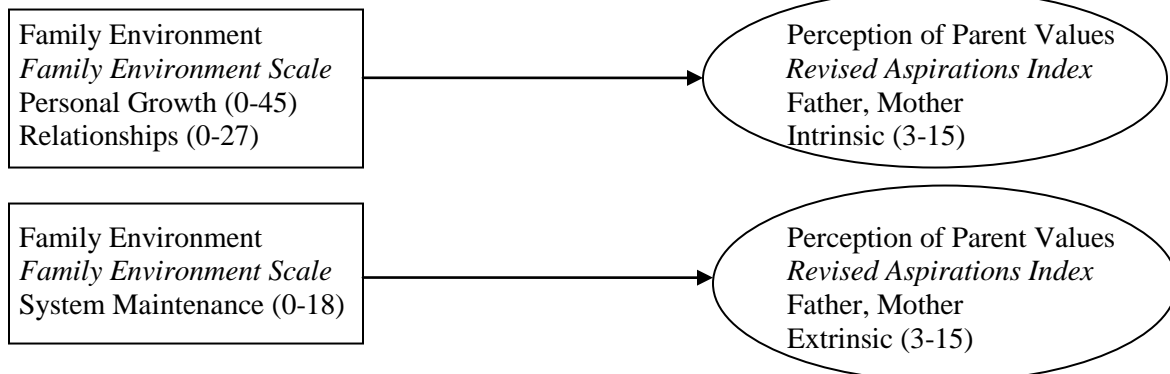
Hypothesis I\*-II:



\*Will run a *T* – test to determine if the regression coefficients are statistically different.



Hypothesis III:



APPENDIX D

QUALITATIVE DATA FROM PARENT DATA COLLECTION

<i><b>In what ways have you taught important values to your children? You may provide one sentence or several paragraphs.</b></i>
<b>Mother Answers:</b>
By Example
By being open, honest, kind and living life by example.
Setting the example of helping others, being kind and compassionate. Also, by being faithful to God. Setting good example of work ethics.
Try to model and walk the talk.
Our children have grown up in a loving, honest household, knowing right from wrong, being disciplined and in loving home at all times. Our children have been taught to share, love each other & be patient! Our children know to look after each other, support one another but respect each other individual personalities
Reading books and seeing movies in early childhood that portrayed important values, talking with them about values using teachable moments, raising them in a loving, mission-driven church, trying to be a consistent model of important values in my words and actions.
I have tried to show my child to be responsible for her actions. To be honest in her dealings with other people. To work hard and not expect have the expectation that someone will take care of you.
My husband and I have been involved in many service activities and have taught our children to think of others, too. When our son graduated from the military's Defense Language Institute (DLI), one of his Arabic instructors paid us the best compliment that (in my estimation) a parent can receive. This former officer in the pre-Saddam Iraqi army told us that he looks for one of two traits in his students. Intellect and good up-bringing. He said he found both in our son. I have always believed that Emotional Quotient is as important, if not more important, than Intelligence Quotient and the only way it can be developed is by going outside of yourself and your problems to understand and help others.
<b>Father Answers:</b>
Always do your best and carry yourself in a respectful way.
Some children have been different from others, but mainly by living and talking values as we live.
trust God, work hard, be honest, love family
BY SETTING AN EXAMPLE FOR THEM TO FOLLOW

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