AN EXPLORATION OF PARENTING STYLES’ IMPACT ON
THE DEVELOPMENT OF VALUES

Kristi Ann Mannon, M. S.

Dissertation Prepared for the Degree of
DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS
August 2015

APPROVED:
Amy R. Murrell, Major Professor
Richard Rogers, Committee Member
Daniel J. Taylor, Committee Member
Vicki Campbell, Chair of Department of Psychology
Costas Tsatsoulis, Interim Dean of the Toulouse Graduate School

The term emerging adulthood was coined during the 21st century to describe human development between adolescence and adulthood, during the ages of 18-25. During this stage, individuals can explore life areas. Emerging adults beginning college have a unique opportunity to form their identities and develop value systems. With increasing autonomy, college students have possibilities for positive development and risk; values may be imperative in that differentiation. Furthermore, value systems are believed to play a major role in decision-making. Parents are influential in values development. During emerging adulthood, individuals have opportunities to notice discrepancies between their parents’ value system and society. Thus, emerging adults evaluate and choose personal values, which may or may not be similar to those of their parents, peers, or broader culture.

Findings from this study indicate female caregivers’ parenting styles and closeness of the parent-child relationship have significant direct effects on the degree to which values are freely chosen. Specifically, authoritarian parenting style (β = -.43, B = -1.70, p < .001), authoritative parenting style (β = .12, B = .53, p < .001), and emotional support (β = .30, B = 6.80, p < .001) significantly predicted the degree to which values are intrinsically chosen. Only one significant relationship was found for male caregivers; there was a significant positive relationship between the authoritative parenting style and quality of the parent-child relationship (β = .64, B = .10, p < .001).
Copyright 2015

by

Kristi Ann Mannon
ACKNOWLEDGMENTS

I would like to thank my major professor, Dr. Amy R. Murrell, for her commitment to her students’ growth, both personal and professional. She has always gone the extra mile to help her students grow and provide an environment where students can follow what is important and matters to them. I would also like to thank my committee members, Dr. Taylor and Dr. Rogers for their helpful insights and suggestions that aided in the completion of this project.

I would also like to thank all of my “labbies” who were always available for support and encouragement. In particular, special thanks are due to Rawya Al-Jabari for her unwavering love and support throughout my graduate school career.

In addition, I would like to thank my family for all of their love and support throughout my graduate training. I especially want to acknowledge my love and appreciation for my parents. Without my parents’ unwavering love and support, I would not be the person I am today nor would I have been able to reach this achievement. Finally, and most heartfelt, I thank my wonderful husband, Eric, for all of his support, encouragement, love and wisdom.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGEMENTS</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>ix</td>
</tr>
<tr>
<td>CHAPTER 1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Emerging Adulthood</td>
<td>3</td>
</tr>
<tr>
<td>1.1.1 Development of Emerging Adulthood</td>
<td>4</td>
</tr>
<tr>
<td>1.1.2 Defining Emerging Adulthood</td>
<td>6</td>
</tr>
<tr>
<td>1.2 Conceptualizations and Definitions of Values</td>
<td>12</td>
</tr>
<tr>
<td>1.2.1 Functional Contextualism</td>
<td>15</td>
</tr>
<tr>
<td>1.2.2 Relational Frame Theory (RFT)</td>
<td>16</td>
</tr>
<tr>
<td>1.2.3 ACT Treatment Model</td>
<td>17</td>
</tr>
<tr>
<td>1.2.3.1 ACT Approach to Values and Valuing</td>
<td>20</td>
</tr>
<tr>
<td>1.2.3.1.1 Values Clarification from an ACT Perspective</td>
<td>21</td>
</tr>
<tr>
<td>1.2.4 Values in Emerging Adults</td>
<td>23</td>
</tr>
<tr>
<td>1.2.5 Family Influences on Value Development and the Family Value Transmission Model</td>
<td>23</td>
</tr>
<tr>
<td>1.3 Parenting Styles</td>
<td>25</td>
</tr>
<tr>
<td>1.3.1 Baumrind’s Three Parenting Styles</td>
<td>26</td>
</tr>
<tr>
<td>1.3.1.1 Permissive Parenting Style</td>
<td>26</td>
</tr>
<tr>
<td>1.3.1.2 Authoritarian Parenting Style</td>
<td>28</td>
</tr>
<tr>
<td>1.3.1.3 Authoritative Parenting Style</td>
<td>29</td>
</tr>
</tbody>
</table>
1.3.1.4  Comparison between Parenting Styles........................................31

1.4  Current Project and Rationale..........................................................32
  1.4.1  Hypotheses................................................................................33

CHAPTER 2. METHOD..............................................................................35
2.1  Participants......................................................................................35
2.2  Measures.........................................................................................37
  2.2.1  Demographics............................................................................37
  2.2.2  Parental Authority Questionnaire (PAQ).....................................38
  2.2.3  The Quality of Relationships Inventory (QRI).............................39
  2.2.4  Personal Values Questionnaire (PVQ)........................................40
2.3  Procedures......................................................................................42

CHAPTER 3. RESULTS............................................................................44
3.1  Descriptive Statistics....................................................................44
3.2  Measures.........................................................................................46
3.3  Missing Data and Assumption Testing..........................................48
3.4  Hypothesis Testing.........................................................................49
  3.4.1  Hypothesis Testing and Results with Female Caregivers............52
    3.4.1.1  Hypothesis 1a..................................................................52
    3.4.1.2  Hypothesis 1b..................................................................52
    3.4.1.3  Hypothesis 2a..................................................................53
    3.4.1.4  Hypothesis 2b..................................................................53
    3.4.1.5  Hypothesis 3....................................................................53
    3.4.1.6  Hypothesis 4....................................................................53
3.4.2 Hypothesis Testing and Results with Male Caregivers

3.4.2.1 Hypothesis 1a

3.4.2.2 Hypothesis 1b

3.4.2.3 Hypothesis 2a

3.4.2.4 Hypothesis 2b

3.4.2.5 Hypothesis 3

3.4.2.6 Hypothesis 4

3.5 Exploratory Analyses

3.5.1 Results with Female Caregivers

3.5.2 Results with Male Caregivers

3.6 Discussion

3.6.1 Results with Female Caregivers

3.6.2 Results with Male Caregivers

3.7 Limitations

3.8 Future Directions

3.9 Clinical Implications

3.10 Conclusion

APPENDIX A INFORMED CONSENT

APPENDIX B DEMOGRAPHICS QUESTIONNAIRE

REFERENCES
<table>
<thead>
<tr>
<th>Table Number</th>
<th>Table Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>Descriptive Statistics</td>
<td>36</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>SES Descriptive Statistics</td>
<td>45</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Female Caregiver Descriptive Statistics and Correlations Among Key Variables</td>
<td>47</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>Male Caregiver Descriptive Statistics and Correlations Among Key Variables</td>
<td>47</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>Measure Minimum, Maximum, and Range</td>
<td>48</td>
</tr>
<tr>
<td>Table 3.5</td>
<td>Female Caregiver Multicollinearity Statistics (VIF scores)</td>
<td>52</td>
</tr>
<tr>
<td>Table 3.6</td>
<td>Male Caregiver Multicollinearity Statistics (VIF scores)</td>
<td>52</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Responsiveness and demandingness of parenting styles</td>
<td>27</td>
</tr>
<tr>
<td>3.1</td>
<td>Hypothesized path model</td>
<td>51</td>
</tr>
<tr>
<td>3.2</td>
<td>Path model for female caregivers</td>
<td>54</td>
</tr>
<tr>
<td>3.2</td>
<td>Path model for male caregivers</td>
<td>59</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

The term *emerging adulthood* originated during the 21st century, in response to societal changes that led to delays in life altering decisions and value formation, as a conceptualization of typical human development between the ages of 18 to 25 (Arnett, 2000). Emerging adulthood defines the stage between adolescence and adulthood in which individuals can openly explore different areas of life such as, love, work, and worldviews (Arnett, 2004). Similar to adolescence, individuals in emerging adulthood focus on areas such as academic achievement, developing close relationships, following societal rules, and developing a cohesive sense of self; however, the emphasis is more focused on continuing mastery in these areas in order to transition into young adulthood roles (Cohen, Kasen, Chen, Hartmark, & Gordon, 2003). Additionally, unlike adulthood, emerging adulthood is a period with less emphasis on career, marriage, and parenthood; this time includes more emphasis on individualistic qualities and on identity formation processes such as developing character, accepting responsibility for self, making independent decisions, and becoming financially independent (Arnett, 1997; 1998).

Many emerging adults postpone fixed career or relationship commitments in order to explore various options before choosing one that best fits with their goals (Roisman, Masten, Coatsworth, & Tellegen, 2004). A typical setting for this identity exploration is college. College provides a unique opportunity for emerging adults to form their identities and develop independent value systems (Hauser & Greene, 1991). With increased autonomy, college students experience opportunities for identity and value development. Values may be imperative in the identity development process because value systems are believed to play a major role in the decision-making process and behaviors (Schwartz, 1992).
During emerging adulthood, individuals are likely to notice discrepancies between their parents’ value system and the broader social system. The resulting uncertainty allows individuals the opportunity to evaluate their parents’ values and choose their own. Individuals may or may not choose values similar to their parents’ values, peers’ values, and societal values; nevertheless, it appears parents are highly influential in the development of values (Simpson, 2001; Steinberg & Sheffield Morris, 2001). Research has examined the influence of parents on value development in adolescence. However, empirical research regarding the influence of parents on value development in emerging adulthood is not as prevalent and more research is needed (Aquilino, 2006). Other important factors that may impact value development are parenting style and the quality of parent-child relationship. A small amount of research (e.g., Bartle-Haring, Brucker, & Hock) lends support to the idea that parent-child attachment affects broader identity formation in emerging adulthood, specifically. Further, research suggests certain parenting styles tend to have different effects on the parent-child relationship. However, very little research has examined the impact of parenting style on value development and what has been done has been done with adolescent samples. Unfortunately, little to no empirical research has examined the influence of parenting style and quality of parent-child relationship on value development, specifically, in emerging adulthood. Thus, this is an important gap in research, which needs to be addressed.

The goal of this study is to gain understanding regarding how parenting styles’ influence on value development in emerging adulthood. In particular, the literature regarding emerging adulthood, values, parenting styles, and quality of parent-child relationships will be reviewed to provide an understanding of what is known concerning value development in emerging adulthood.
1.1 Emerging Adulthood

In the past few decades, a significant lifestyle transformation has occurred among young people in American society. As recently as 1970, the typical 21 year old was married or soon-to-be married, caring for a newborn child or expecting one, finished with education or scheduled to finish soon, and settled into a long-term career or the role of full-time mother (Arnett & Taber, 1994; Bianchi & Spain, 1996). In the recent past, young people grew up quickly and made important and enduring decisions at a relatively early age. However, times have changed dramatically in the past few decades. Today, the life of a 21 year old differs vastly from previous 21 year olds. In many cases, education may last several more years, either from an extended undergraduate path or due to graduate or professional school. Approximately two-thirds of young people in America attend college following high school graduation, the highest proportion in American history. Furthermore, one-third of college graduates begin graduate school the following year. Job and career changes are more frequent as young people search for work, which is not merely financially stable, but also personally fulfilling (Arnett, 2000).

For modern young people, the path to adulthood is a lengthy one. Typically, young people leave home around the age of 18 or 19. Most do not marry, become parents, or obtain a long-term career until their late 20s. Rather, most modern young people use their late teens to late twenties as a time to explore possibilities and gradually move towards significant life-changing decisions (Kroger, 2000; Pascarella & Terenzini, 1991). With this new found freedom to explore different options comes excitement, high hopes, dreams, and expectations. However, this is also a time period of anxiety and uncertainty (Arnett, 2000; 2006). Many young people struggle with unsettling uncertainty while enjoying more freedom than in childhood and adolescence, a freedom that will lessen when they take on the full load of adult responsibilities.
1.1.1 Development of Emerging Adulthood

The significant rise in the typical ages for marriage and parenthood has, in part, led to the development of emerging adulthood. In the United States in the 1950s, most women married at 20 and most men married at 22. In 1970, Americans married at only slightly older ages, with women typically marrying at 21 and men at 23. However, in 2000, merely three decades later, the typical age of marriage raised, to 25 for women and to 27 for men. Typical age for entering parenthood has followed a comparable pattern. From 1950 to 1970, young couples tended to have their first child while they were in their early twenties. (Arnett & Tabor, 1994). Most young couples today are postponing becoming parents until at least their late twenties (Arnett 2000, 2004).

Several factors have contributed to this dramatic shift in postponing marriage and parenthood. One factor is the development and use of birth control, related to young people having less strict sexual morals (Arnett, 2000). Because a shift has occurred in societal expectations, it is more common and acceptable for individuals to engage in sexual relationships outside of marriage (Michael, Gagnon, Laumann, & Kolata, 1995; Cohen, Kasen, Chen, & Gorden, 2003). Moreover, in modern times it has become typical for young people to engage in multiple sexual relationships prior to marriage (Arnett, 2000; 2004).

Another contributing factor for the rise in the typical age of marriage and parenthood is the aforementioned greater emphasis on, and increased years dedicated to, pursuing higher education. A majority of young people are choosing to postpone marriage and parenthood until their studies are completed, thus these commitments are often not made until the mid- to late-twenties (Arnett, 2000).
Perhaps less palpable than a change in society’s views on sexual behaviors, or an increased emphasis on obtaining higher education, is a change in how young people perceive the value of becoming an adult. One of the reasons for the dramatic rise in typical ages of marriage and parenthood is the significant change in perception of committing to those roles (Arnett, 2000). In the 1950s, young people tended to be eager to become an adult and start a family (Arnett & Tabor, 1994). Conversely, modern young people tend to see adulthood and its responsibilities in a different manner. Whereas, in the 1950s marriage, home, and children were often considered achievements, many young people today see these as things that should be avoided or postponed until they have experienced life more fully. While adulthood and its responsibilities can provide stability, it can also represent a decrease in freedom or opportunities (Arnett, 2004). For example, while a steady career and family can provide one with a sense of stability, the demands of one’s career, spouse, and children can limit one’s freedom and opportunities.

The shift in the nature of women’s roles, also contributes to lessened desirability of adult responsibilities than it was for women 50 years ago. In 1950, young women tended to face a great deal of societal pressure to wed. A woman who was not married by her early twenties was often viewed negatively by society (Arnett & Tabor, 1994; Douglass, 2005). Additionally, in 1950, very few women attended college, and it was common for women to emphasize finding a mate rather than their education. There were a limited number of occupations available to women and positions were typically viewed as temporary until they married and had children (Arnett, 2004). Conversely, young women in the 21st century have a very different experience. Arnett (2006), reports 56% of American undergraduate students are women. Furthermore, young women’s job opportunities are practically unlimited and the number of male dominated fields is
decreasing. With these new opportunities available to young women and with less societal pressure to get married and have children, the lives of modern young woman remain vastly different than those of women 50 years ago. Many young women embrace these advancements and freedoms and choose to enjoy their emerging adult years prior to marriage and/or parenthood (Arnett, 2004; 2006).

The rise of emerging adulthood is the result of a variety of factors. Modern young people have many more freedoms and opportunities available to them than young adults 50 to 60 years ago. Young people today can utilize the years of emerging adulthood, the years between completing one’s formal education and entering into marriage and parenthood, to explore a variety of options and paths and to develop their values. Due to gender roles, society’s expectations, and economic factors, young people of the past did not have such freedoms (Arnett, 2004 & 2006).

1.1.2 Defining Emerging Adulthood

Traditionally, developmental theories have concentrated on childhood and adolescence as the most important periods in life for psychological and physical development. As a result, little emphasis has been given to later years. However, developmental theorists have begun to focus on a lifespan approach to development, focusing on development and changes that occur throughout a lifetime in order to better explain human development (Arnett, 2000; Rutter & Sroufe, 2000). As a result, many developmental theorists have also begun shifting away from a stage-like developmental approach and focus more on developmental tasks or critical periods where certain skills are gained or achieved (Burt & Masten, 2010).
Different sets of developmental tasks have been proposed for varying age periods (Roisman et al., 2004; Masten & Coatsworth, 1998). For example, in the adolescence period, one strives to achieve academic success, learn how to develop close relationships, learn how to follow societal rules, and begin to develop a cohesive sense of self (Arnett, 1997; 1998). In order to better understand individuals in the emerging adulthood developmental period, it is important to differentiate emerging adulthood from other developmental periods (Burt & Masten, 2010). Additionally, because emerging adulthood is its own developmental period, assumptions about emerging adulthood cannot be made based on adolescence or young adulthood. Research indicates the developmental tasks of emerging adulthood differ from tasks in adolescence and young adulthood (Arnett, 2004; Cohen et al., 2003).

Specific developmental tasks differentiate emerging adulthood from adolescence and young adulthood. According to Burt and Masten (2010), the developmental tasks of adolescence include academic achievement, beginning secondary education, developing close relationships, following societal rules, and developing a cohesive sense of self. In emerging adulthood, the developmental tasks are not only to maintain competence in adolescent tasks, but also to achieve a higher level of competence in these tasks. For example, the adolescent task of developing close relationships outside of the home is supposed to lead to the development of a positive, intimate relationship in emerging adulthood. While many of the developmental tasks focus on an individual’s involvement with society, the internal tasks of autonomy, intimacy, and developing an identity are linked to the more external tasks (Arnett, 2000). Thus, values development, part of identity development, is a crucial developmental task of emerging adulthood. Additionally, common developmental tasks of young adulthood include accepting responsibility for oneself, making decisions independently, and being financially independent.
Emerging adults have not yet accomplished these tasks, but rather are moving towards accomplishing those tasks (Arnett, 2000). Thus, the individual in the emerging adulthood developmental stage has surpassed adolescence, but has not yet obtained true development of the stage of young adulthood.

It is important to note that the developmental period of emerging adulthood does not all apply to all societies. Indeed, emerging adulthood seems to be limited to cultures that postpone entry into adult roles until the twenties. In developing countries, only a privileged few may actually experience emerging adulthood and often for a shorter time span than their Western counterparts (Badger, Nelson, & Barry, 2006; Nelson & Chen, 2007). Furthermore, it appears that countries with limited economic resources may not experience emerging adulthood since these individuals typically enter marriage, parenthood, and lifelong work early (UNICEF, 2009). Also, in industrialized countries individuals may vary in their definition of adulthood. Research indicates. However, research indicates in many industrialized countries and cultures to be the most important indicators of reaching adulthood included accepting responsibility for oneself, making independent decisions, and becoming financially independent and that these are all gradually attained gradually in this time period (Arnett, 2001, 2003; Facio & Micocci, 2003; Mayseless & Scharf, 2003; Nelson, Badger, & Wu, 2004; Nelson et al., 2007).

Arnett (2006) defines five main characteristics that define emerging adulthood and differentiate it from adolescence and young adulthood. The characteristics include instability, self-focus, feeling in-between, increased possibilities, and self-exploration (Arnett, 2004). Instability refers to the exploratory nature of this period in numerous areas, including residence locations, school, career, and relationships. Emerging adulthood provides numerous opportunities for exploring activities, beliefs, education, and values (Hauser & Greene, 1991).
This exploration helps individuals recognize what they desire in a career, relationships, and life goals and helps them decide how best to reach these goals. Another marker of instability in this time period is the high rate of residential change from the late teens through the mid-twenties. For most, the first residential change occurs around the age 18 or 19 when an individual moves out of their parents' home, either to go to college or simply to be independent (Goldscheider & Goldscheider, 1999) and many other residential changes are likely to follow. Those who attend a residential college may move from a dormitory into an apartment after their first year. Additionally, many individuals leave college after 1 or 2 years (National Center for Education Statistics, 2004), and when they do it is likely a residential change will occur. Research indicates that most American emerging adults cohabit at some point during their twenties, and 90% of cohabitating couples have residential changes within 5 years (Bumpass & Liu, 2000). Moreover, 40% of emerging adults move back home at some point in their early twenties (Goldscheider & Goldscheider, 1999; Cohen, et al., 2003), usually for only a temporary period, after which they move out again.

Because emerging adults tend to be relatively absent of customary obligations to others they are considered to be self-focused (Nelson, Padilla-Walker, Carroll, et al, 2007). Unlike adolescents, emerging adults have the responsibility of making decisions regarding everyday activities (Arnett, 2001) and other decisions that might be guided by their own values and beliefs. The freedom to focus on self allows emerging adults to engage in activities that can help them define life goals and help them become self-sufficient. Arnett (2006) demonstrates that self-focused does not mean self-centered. Research comparing adolescents and emerging adults showed emerging adults are less egocentric, more able to understand and relate to others’ points of view, and more considerate of others’ feelings than adolescents (Lawford, Pratt, & Soucie, 2012).
Cronce and Corbin (2010) found emerging adults do not feel reaching adulthood is necessarily linked to obtaining an education or getting married. Rather they reported three main criteria for reaching adulthood: accepting responsibility for self, making independent decisions, and becoming financially independent. Emerging adulthood is a time for possibilities and identity exploration. Research has found that 96% of individuals between the ages of 18-24 indicated they believed they would achieve their goals and get where they wanted to be in life (Hornblower, 1997). Because life has not yet thwarted many of their attempts and experiences many emerging adults maintain high hope for their futures in regards to work and relationships. Furthermore, emerging adulthood is the first time for many individuals to leave their family of origin and explore their own beliefs, opinions, and values. Many emerging adults were not able to truly explore and develop their own beliefs, opinions, and values while living with their family of origin and this freedom allows for further identity and values development and for exploring ways to live in congruence with their values.

Erikson (1980) believes integrating elements of an individual’s culture and context into his or her definition of self and being able to distinguish the self as unique are the key characteristics in identity exploration. In other words, identity exploration creates a balance between accepting the values of society and the manner one can live in the society and developing a sense of individuality. Furthermore, according to Schwartz and Pantin (2006) identity exploration typically occurs when an individual’s present sense of identity is not supported or congruent with new demands or changes in their environment. Historically, Erickson believed identity formation was achieved during adolescence. However, current research indicates this is not the case and proposes that identity development issues remain especially important to individuals from age 18 to their mid-20s (Arnett, 2006; Labouvie-
Vief, 2006; Schwartz & Pantin, 2006). Kroger (2000) found most identity exploration occurs during life transitions such as leaving home, attending college, and beginning a job. Given that emerging adulthood is a period with many life transitions, it is a period ripe for identity exploration. During emerging adulthood, identity exploration includes professional and personal exploration. Emerging adults are first faced with the decision to begin working or begin college. The majority of individuals (68.8%) who have earned a high school diploma or General Equivalency Diploma (GED) in recent years begin college (Cronce & Corbin, 2010). Emerging adulthood is also a time for individuals to explore what things they are good at and what things they enjoy. Emerging adulthood provides the opportunity for individuals to explore different jobs or different fields of employment to help them gain an understanding of what is the best fit for them (Cronce & Corbin, 2010).

In regards to personal role identity, research indicates this part of identity includes one’s goals, beliefs, opinions, and values (Schwartz & Pantin, 2006). 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). Sheldon (2004) performed a longitudinal study of 109 college students and compared reported values upon first entering college and then again at graduation. Results indicated changes in individual value systems do occur in this time period; thus, values remain important and are still developing in emerging adults (Sheldon, 2004). Overall, research indicates identity exploration endures past adolescence into emerging adulthood, and value development is an important aspect of this development.
1.2 Conceptualizations and Definitions of Values

Since values are important during emerging adulthood, understanding and exploring values and the role they play in decision-making and behavior will help provide a clearer understanding of development during this critical time period. While values have been studied extensively, the way values are defined, prioritized, and studied varies (Rounds & Armstrong, 2005). This variability in defining values has led to a limited understanding of values and how they influence one’s life. However, prominent values models exist in literature. These models influence how values have been previously examined.

Allport (1961) defined values as “belief(s) upon which a man acts by preference” (p. 454). He identified two types of forces that affect an individual’s behavior: genotypes and phenotypes. Genotypes are internal forces that relate to how a person incorporates information to interact with the external world. Phenotypes are external forces in the environment that impact one’s behavior. From Allport’s perspective, values are affected by one’s environment and culture; thus, providing an important framework to explain behavior. In this theory value orientations help incorporate an individual’s personality and people use value orientations to contemplate their “philosophies of life” (Allport, 1961, p. 543).

Allport and his colleagues were the first to empirically examine values; they developed the Allport-Vernon Lindzey Study of Values (SOV; Allport, Vernon, & Lindzey, 1960). The measure was designed to examine the extent to which individuals endorse six important value directions: theoretical (truth), economic (usefulness), esthetic (harmony), social (altruistic love), political (power), and religious (unity). The SOV has respondents rank order their preferences for statements related to behavioral scenarios, which are consistent with the six value directions. The results yield a plot of the relative importance to the person of the six values (Allport, 1961).
The SOV has been used for years in education, research, and counseling settings. While the SOV is no longer in print and is seldom used today because it is considered outdated (Kopelman, Rovenpor, & Guan, 2003), an updated version of the SOV is available from the authors; its psychometric properties are strong and similar to the original (Kopelman et al., 2003).

Another major contributor to the explanation and measurement of values, Milton Rokeach, defined values as “beliefs with some means or end of action that are judged to be desirable or undesirable,” and noted that values are enduring but less stable than personality traits (Round & Armstrong, 2005, p. 308). Rokeach theorized two types of values: instrumental and terminal. Instrumental values refer to preferable modes of behavior. These are preferable modes of behavior or means of achieving the terminal values and include values such as cheerfulness, ambition, love, courage, and honesty. Terminal values refer to desirable end-states of existence. These are the goals that an individual would like to achieve during his or her lifetime. Examples of terminal values include true friendship, equality, freedom, social recognition, family security, and a comfortable life (Rokeach, 1973). Rokeach (1968) based his theory of values on the idea that values can be intrinsically interesting, cross-culturally applicable, and not vulnerable to social desirability bias. Furthermore, this theory suggests that behavior change can be brought about by identifying inconsistencies between self-conceptions/valued beliefs and cognitions about one’s behavior.

Rokeach’s Value Survey (RSV; 1973) was created to measure the importance of 18 terminal values and 18 instrumental values as a person’s guiding life principles. Examples of terminal values include: freedom, pleasure, happiness, family security, an exciting life, a comfortable life, and a world at peace. Examples of instrumental values include being: capable, clean, ambitious, forgiving, honest, independent, and obedient. Respondents rank these values in
order of importance. The RVS has been prevalent in research settings for some time (Kopelman et al., 2003); however, it has consistently demonstrated poor criterion-related validity in American and Chinese samples (Peng, Nisbett, & Wong, 1997) and only marginal test-retest reliability in 3 samples (Braithwaite & Law, 1985; Miethe, 1985; Feather, 1971).

In addition, Shalom Schwartz is another major contributor to the study of values. Schwartz’s model defines values as “desirable, transituational goals, varying in importance, that serve as guiding principles in people’s lives” (Schwartz, 1992). Schwartz identified three theoretical universal requirements for human existence: biological needs, need for harmonious social interactions, and group survival or functioning. He also identified 10 types of values: achievement (personal success), benevolence (preservation and enhancement of those close to an individual), conformity (restraint of actions/impulses that could disrupt social norms), hedonism (pleasure and sensuous gratification for oneself), power (social status and prestige), security (safety, harmony, and stability of society, relationships, and self), self-direction (independent thought, creating, exploring), stimulation (excitement, novelty, challenge in life), tradition (respect, commitment, and acceptance of traditional culture or religion), and universalism (understanding, appreciation, tolerance, protection for the welfare of all people and nature) (Schwartz & Bilsky, 1987; Seligman, Olson, & Zanna, 1996). These values are considered universal, and research in 67 nations lends support to this idea (Schwartz, 1992, 1994, 2005; Schwartz & Rubel, 2005; Schwartz & Bilsky, 1990).

In the past, behaviorism has been accused of impacting the decline of values research (e.g., Allport, 1961); however, this is not the case with acceptance and commitment therapy (ACT; Hayes et al., 1999). ACT is a treatment model that specifically addresses values. Like the values work conducted by Rokeach and Schwartz, an ACT approach to values assumes that
there are overarching principles that guide individuals’ behaviors. All three models, along with Allport’s approach, indicate that there is some variability with respect to specific valued content but that some core values (e.g., spirituality, social connection, security) tend to exist to varying degrees across context. Additional similarities between ACT and Rokeach’s conceptualization are (a) the idea that there is a distinction between what one believes about him- or her-self and what he or she cares about and (b) the distinction between process and outcome related variables. ACT refers to the process behaviors as goals, as opposed to instrumental values. However, the constructs are really quite similar. Several of the value domains specifically researched in ACT (i.e., social relationships, academic/career, recreation, and so on) map on Schwartz’s principles, Rokeach’s terminal values, and - to a lesser extent - Allport’s original survey items assessing values. Proponents of all of these approaches to values acknowledge that relative importance of a valued area, or domain, may shift over time and situation. The ACT model has a scientific explanation for such shifts.

1.2.1 Functional Contextualism

ACT is a behavior analytic approach to psychotherapy with its foundations in a functional contextual philosophy of science. It is based on relational frame theory (RFT), a post-Skinnerian account of human language and cognition (Hayes, Barnes-Holmes, & Roche, 2001; Hayes, et al., 1999; Hayes, 2004a). The philosopher, Stephen C. Pepper, identified contextualism as one of four worldviews (Hayes, Hayes, & Reese, 1988; see Pepper, 1942). Hayes et al. (1988) state that a world view can be defined in terms of its root metaphor and truth criterion. Root metaphors are established on seemingly well-understood, common sense, everyday objects or ideas, and serve as the basic analogy by which an analyst attempts to
understand the world. Truth criteria are indistinguishably linked to their root metaphors, and provide the basis for evaluating the validity of analyses. The root metaphor of contextualism is the "act in context," whereby any event is interpreted as an ongoing act inseparable from its current and historical context. The truth criterion of contextualism is often dubbed "successful working," whereby the truth and meaning of an idea lies in its function or utility. In contextualism, an analysis is said to be true or valid if it leads to effective action, or achievement of some goal (Hayes, 1993; Hayes et al., 1988).

The ACT model of treatment parallels its philosophical underpinnings. The ACT therapist views psychological events as ongoing interactions between the person as a whole organism, with situational and historical contexts (Hayes, 2004a). Thus, symptoms are never addressed independently of the context in which they occur. The ACT therapist attempts to help the client identify and change the function and context of private events such as difficult thoughts and feelings, rather than the form of such events (Hayes et al., 1999). Additionally, clients are encouraged to identify the function of their behaviors and assess whether they are behaving in a consistent manner with his/her freely chosen values (Hayes et al., 1999).

1.2.2 Relational Frame Theory (RFT)

The RFT account of language and cognition is predicated on the idea that humans have the ability to learn to respond to stimulus events (changes in the environment that influence behavior) on the basis of arbitrary contextual cues (Hayes et al., 1999; see Hayes et al., 2001 for a book-length discussion of RFT). The contextual cues are considered arbitrary to the extent that they are not based on formal properties of the stimuli or direct experience with the stimuli alone. According to RFT, learning to derive relations among events based on arbitrary contextual cues
is the main feature of human language and cognition. It starts with the relation between words and objects. If that arbitrary relation is specified in one direction infants will derive the mutual relation (Lipkens, Hayes, & Hayes, 1993). For example, infants can learn if an object is named “X” then “X” refers to the object. This simple relation will be followed quickly by relations of comparison, time, hierarchical attributes, and so on.

Relational skills are essential to human functioning. Verbal problem solving involves deriving networks in this manner. For example, "because of situation Q, if I do X, Y will follow, which is better than Z." From an RFT perspective, such actions include a small set of relational abilities: names, hierarchical attributes, comparisons, and time or contingency. RFT suggests that relational framing, once learned, occurs constantly and that verbal relations once derived cannot be eliminated, only expanded (Hayes et al., 1999). While these relational skills allow for many pleasant experiences, these same skills also lead to human suffering until individuals learn to bring these skills under better contextual control (Hayes, 1999).

1.2.3 ACT Treatment Model

ACT seeks to undermine these language processes when they are ineffective or harmful (e.g., attempts to avoid, change, or remove private events such as thoughts, emotions, and memories, and/or persistent rule following when it is ineffective) and utilize them when they work (e.g., choosing and behaving consistently with one’s values) (Hayes, Wilson, Gifford, & Walser, 1995). Increased psychological flexibility is the main goal of ACT. Thus, the aim is to increase an individual’s ability to make contact with the present moment and to either change behaviors or persist in behavior when doing so facilitates living consistently with a valued direction (Hayes et al., 1999). ACT has six core processes that are designed with this goal in
mind: acceptance/willingness, cognitive defusion, contact with the present moment, self-as context, values, and committed action. Many times the other five processes are utilized in helping the client live a meaningful life in the service of his/her values.

ACT treatment studies have consistently demonstrated the efficacy and effectiveness for a variety of disorders and problems (Hayes & Follette, 1992). There have been several meta-analyses conducted on ACT (e.g., Hayes, Luoma, Bond, Masuda, & Lillis, 2006; Powers, Zum Vorde Sive Vording, & Emmelkamp, 2009). While there is some variability, the general consensus across studies is that: (a) ACT has a clear advantage when compared to waitlists, placebos, and general treatments as usual; (b) ACT performs similarly (not better, not worse) to gold-standard structured interventions for most conditions; and (c) for several presenting problems, there is a unique mechanism of action in ACT. To outline a bit of detail, consider the findings of the Hayes et al. (2006) meta-analysis. When ACT was compared to wait-list control groups, treatment as usual, or placebo conditions, the effect sizes ranged from $d = 0.71$ at immediate post-treatment to $d = 0.99$ at follow-up. When ACT was compared to other structured interventions for specific problems, the average effect sizes were $d = 0.48$ post-treatment and $d = 0.63$ at follow-up. There was evidence that experiential avoidance (EA), or psychological inflexibility, levels changed prior to – or at least simultaneously with – symptoms in ACT conditions, and not in other treatments (Hayes et al., 2006).

A few specific studies, which are relevant to the proposed, study, either because they include college students, because they emphasize values, or both, are described below. In a university counseling center setting, Forman, Herbert, Moitra, Yeomans, and Geller (2007) compared ACT ($n = 55$) to traditional Cognitive Therapy (CT) ($n = 44$) for treating moderate to severe levels of depression and anxiety. Outcomes indicated equal improvements in depression,
anxiety, functional difficulties, quality of life, and life satisfaction. Statistically significant decreases were found in depression and anxiety, with large effect sizes and clinically significant changes. Orsillo, Roemer, and Barlow (2003) examined a group of four individuals with generalized anxiety disorder (GAD). All individuals evidenced statistically significant changes in depression, anxiety, and experiential avoidance. Furthermore, 50% evidenced “high end state functioning” and each of the four clients in the group displayed important life changes in the service of their values. Heffner, Eifert, and Parker (2003) conducted a case study in which ACT was utilized with an emphasis on the valued living component. The study found nearly 100% abstinence from alcohol use and a significant decrease in overall symptoms of distress.

Several studies have demonstrated similar results, indicating that valuing is negatively correlated with various symptoms of psychopathology (Adcock, Murrell, & Woods, 2007; Plumb et al. 2007; VanDyke, Rogers, & Wilson, 2006; Taravella, 2010). Van Dyke and Rogers (2006) examined 100 undergraduate students on measures of valuing (VLQ), psychological distress (OQ-45), and experiential avoidance (AAQ-22). Results showed individuals who indicated low valuing reported greater distress and individuals who indicated low and moderate valuing reported greater experiential avoidance. This indicates highly valuing across several domains results in less psychological distress and experiential avoidance (Van Dyke & Rogers, 2006). Likewise, in a study of valuing and psychological distress, Adcock, Murrell, and Woods (2007) examined 388 undergraduate students to assess the relationship between valuing and clinical distress, as well as the potential mediating effect of experiential avoidance. Results suggested that valuing many things was highly predictive of psychological well-being. These results indicated that valuing as a generalizable behavior predicts greater psychological well-being, and that experiential avoidance partially mediates the relationship between valuing and psychological...
distress (Adcock, et al., 2007). In addition, McCracken and Yang (2006) found that with a sample of 144 chronic pain patients that living in accordance to the patient’s chosen values predicted level of functioning. These findings were independent of the level of pain acceptance; thus, suggesting valuing and acceptance are independent processes and that each are important in the presence of pain (McCracken & Yang, 2006). Therefore, empirical evidence supports the inclusion of valuing as an important component of ACT.

1.2.3.1 ACT Approach to Values and Valuing

From an ACT perspective, “values are verbally construed global desired life consequences” (Hayes, et al., 1999, p. 206). Similar to other perspectives on valuing, ACT postulates all verbally competent human beings have the capacity for values because relevant language processes emerge in early childhood (Hayes et al., 1999). The ACT perspective describes values in a similar manner as described by the social psychological perspective, varyingly, as “guides to action” (Hayes et al., 1999, p. 204), “personal choices about desirable life ends” (Hayes et al., 1999, p. 203), “life directions” (Hayes et al., 1999, p. 32), “guidance mechanism(s) that lead to purposeful, enriching patterns of behavior” (Strosahl et al., 2004, p. 45), and as “leading principles” (Robb, 2007, p. 118). One’s values are the answer to the question, “In a world where you could choose to have your life be about something, what would you choose?” (Wilson & Murrell, 2004, p.135).

ACT differentiates between values and goals. From an ACT perspective, goals are consequences, or in other words, concrete future events that can be worked towards and obtained. As examples, earning a degree, finding a job, and having children are goals. On the other hand, values are qualities of ongoing patterns of action. Values are continuous and never
ending; they are never obtained. Values are commonly thought of as directions on a compass rather than a destination. Examples potentially related to aforementioned goals might include seeking knowledge and being a good parent. Values help guide one’s life and allow life to be lived in a meaningful way.

Additionally, from the ACT perspective, values are choices that are to be made freely among alternatives, with or without reasons present. Individuals are urged to choose what they want their lives to be about, without considering whether anyone else would know, or approve, and to do so in a manner as if anything were possible (Wilson & Murrell, 2004). This approach to valuing is done in efforts to prevent pliance, or other avoidance related to rule-governed behavior. Pliance happens when individuals engage in behaviors in an attempt to please others or “be good” (Hayes, Strosahl et al., 1999). Externally based contingencies are often not enough to sustain behavior outside the presence of the contextual variables (e.g., around family or peers) and thus value-consistent behavior is less likely across varying contingencies. Intrinsically motivated valuing, on the other hand, can guide behavior across both situation and time (Hayes et al., 1999).

1.2.3.1.1 Values Clarification from an ACT Perspective

Values clarification, utilized to understand and explore values, is important to development. Values clarification can take many forms simple question asking, or more complex facilitation of experiential exercises. In such exercises, a therapist may have a client imagine what he/she would wish loved ones would ideally say at his/her retirement or funeral. Some people may struggle to identify values in this manner. Individuals, whether consciously or unconsciously, may avoid identifying values because they have experienced disappointment and
hurt as a result of caring about things in the past choose, (Hayes et al., 1999). From an ACT perspective, it is important for a therapist to understand a client where he/she is and to progressively shape valuing as part of an empathic therapeutic relationship. It is the responsibility of the clinician utilize other techniques (e.g., defusion, acceptance) to allow for values clarification to occur.

Additionally, ACT therapists may utilize more formal values assessments to help clients identify and clarify their values. The most common of these measures include the Personal Values Questionnaire (PVQ; Blackledge & Ciarocchi, 2007) and the Valued Living Questionnaire (VLQ; Wilson & Groom, 2002). Both measures assess values with respect to specific domains of living, which are frequently identified by people as important. Regardless of whether values clarification is informal or formal, it may be utilized to identify targets for exposure-based techniques (e.g., defusion) that foster psychological flexibility (Wilson & Murrell, 2004). One example of this is when an individual’s values are held inflexibly, as “have to’s,” or piance-type responses. This rule-governed behavior can lead to avoidance of value identification and living consistently with one’s freely chosen values. This pliant valuing is correlated with psychological distress (Törneke, Luciano, & Valdivia Salas, 2008). Another example of when exposure might be used for problematic language-based valuing is if value domains are of high importance to the client, but he/she does not live consistently with these important values, again leading to distress. Values domains become associated with negative private experiences; thus, susceptible to avoidance and distress. Therefore, targeting these domains for exposure, which reduces arousal and elicitation - and increases likelihood of approach - is a reasonable treatment strategy. Additionally, values clarification is utilized to recognize targets for building patterns of meaningful committed action, or specific values-
consistent behaviors in which the client can begin to engage (Wilson & Murrell, 2004). From a behavioral perspective, valuing is about finding powerful reinforcers and using them to motivate individuals to move forward in their lives. The benefit to humans being able to derive responses based on non-formal properties is that we can imagine value-consistent futures and act based upon them; RFT researchers refer to this as augmenting (Hayes, et al., 2001).

1.2.4 Values in Emerging Adults

Emerging adulthood is a time of exploration and clarification. Because many universities offer psychological services for students, many emerging adults have access to free or cost-reduced treatment. Therefore, this seems an ideal time and place to participate in treatments with a heavy focus on values, such as ACT. However, little to no research has been conducted on value development in emerging adults, from an ACT perspective.

1.2.5 Family Influences on Value Development and the Family Value Transmission Model

Grusec and Goodnow (1994) suggest that parents’ understanding 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). One theory about value development comes from the value transmission model. Value transmission is the method by which parents’ communicate their values to their children, and in turn, the child adopts these values in some form. 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
ongoing and adaptive and adolescents learn to utilize their values systems across a variety of situations. Additionally, this process considers other influences including peers and culture, which are likely to play an important role in developing a value system in the absence of parental monitoring. Value transmission is believed to neither be completely present nor absent in a family, rather value transmission is partial. Some values are transmitted and accepted while others are not transmitted and are rejected (Schonpflug, 2001). Partial value transmission permits growth and development as value systems change throughout time and generations.

Joan Grusec and Jacqueline Goodnow (1994) suggested a bidirectional theory of value acquisition, in regard to how adolescents acquire values within the family environment. This model assumes all parent values are “good” and “positive” and does not attend to parental values that may be “negative.” Despite this limitation, Grusec and Goodnow’s model is a highly used theoretical model, which has been empirically tested and supported. This model has a two-step process for value perception and acceptance by an adolescent. First, the adolescent observes what values are important to their parent or parents, and then chooses either to accept or reject the values. Recent research on transmission of values indicates that the level of agreement between parent and adolescent/young adults is a function of the type of value being transmitted. For example, research has found value transmission was highest for values of moral or community issues, such as conformity, tradition, and benevolence (Albert & Tromsdorff, 2003; Knafo & Schwartz, 2009; Schonpflug, 2001). However, values concerning personal issues such as fame, achievement, and self-direction had a lesser degree of agreement between parent and child (Albert & Tromsdorff, 2003; Knafo & Schwartz, 2009; Schonpflug, 2001).

Different variables within the family are hypothesized to influence the accuracy and acceptance of children’s perception of parental values (Grusec & Goodnow, 1994; Knafo &
A study conducted by Knafo and Schwartz (2009) indicates family demographics including educational attainment, and membership in social organizations and religion can lead to higher accuracy and perception. This is thought to be because these variables reinforce the communication of the values and parent’s authenticity. Smetana (2000) proposed adolescents are more likely to accept values if they feel their parents are authentic or an expert in the area.

Parents are also thought to impact value transmission through parenting style (Grusec, Goodnow, and Kuczynski, 2000). Specific parenting styles and practices are likely to make it easier for children to understand what values are important to their parents. Thus, certain parenting styles may lead to greater acceptance of these values or better ability to decide to accept or reject values. Communication within families is thought to play an important role in value transmission. Schwartz (2010) found when parents create an environment where their most important values are communicated, adolescents are more likely to more accurately perceive and understand the family value system; thus, they are more able to incorporate these values into their own value system. Research suggests how important the values are to the parents, family activities that demonstrate values, and communication within the family, all support value transmission in adolescents (Day, Borkowski, Dietmeyer, Howsepian, & Saenz, 1992; Pinquart & Silbereisen, 2004).

1.3 Parenting Styles

Parental values, family activities and communication are reflected in parenting styles. A parenting style is defined as a psychological construct characterized by standard strategies that parents use as they raise their children. Various theories exist in regards to the best parenting
styles and the way those styles are defined. However, one of the most well-known models, and
the only one with a measure to assess parenting style from the child’s perspective, is Baumrind’s
(1971) model. Therefore, Baumrind’s model is discussed and explored in the current study.

1.3.1 Baumrind’s Three Parenting Styles

Baumrind (1971) classified parent’s behavior according to high or low demandingness
and responsiveness, and created a typology of three parenting styles: authoritarian, authoritative,
and permissive (see Figure 1.1). Baumrind (1991) postulated that each of these parenting styles
showed different naturally occurring patterns of parental values, practices, and behaviors, as well
as a distinct balance of responsiveness and demandingness.

1.3.1.1 Permissive Parenting Style

According to Baumrind’s (1971) perspective, permissive parents are more responsive
than they are demanding. In one study, permissive, indulgent parents were described as
“nontraditional and lenient, did not require mature behavior, allowed considerable self-
regulation, and avoided confrontation” (Baumrind, 1991, p. 62). This style of parenting dates
back to the philosopher Rousseau in the eighteenth century and was strongly promoted in the
1970s by the Children’s Movement (Baumrind, 1978). Baumrind (1978) described the idea
behind permissive parenting as self-actualization, or the natural tendency of children to learn on
their own all they need to know, and to act on this knowledge when ready to do so. This
parenting style is characterized by an affirmative, accepting, and benign manner that frees
children from restraint. Permissive parents are warm, loving, and child-centered, but they are
prone to sudden outbursts of anger when they reach their capacity of tolerance. These parents
Figure 1.1. Responsiveness and demandingness of parenting styles.

often use love withdrawal and ridicule as a means of discipline. Though they often grant their children’s demands for independence, they fail to engage in independence training of their children (Baumrind, 1973).

Children reared in permissive homes tend to display some negative developmental outcomes. These children generally express high levels of self-confidence, but are prone to delinquency and a lack of interest in school during adolescence (Lamborn et al., 1991). They are also more likely to use tobacco and alcohol as minors (Cohen & Rice, 1997). Bahr and Hoffman (2008) found permissive parents’ children have nearly tripled the risk of participating in heavy drinking. However, the largest differences found between children with parents that are permissive and children whose parents are not is the fact that they have a tendency to be
unengaged socially (Lamborn, Mounts Steinberg & Dornbusch, 1991). Due to a lack of previous research, there are no results on the impact of the permissive parenting style on value transmission. Research supports differences between among permissive parents, and Maccoby and Martin (1983) revised the permissive parenting style prototype to include two subtypes of this parenting style (i.e., permissive indulgent and permissive neglectful). Thus, researching the permissive parenting style is difficult in part due to differences within this parenting style. The work is further complicated by the lack of a psychometrically sound measure to assess permissive indulgent and permissive neglectful parenting styles from the child’s perspective.

1.3.1.2 Authoritarian Parenting Style

Authoritarian parents are highly demanding, directive, and not responsive. According to Baumrind, "They are obedience and status-oriented, and expect their orders to be obeyed without explanation" (p. 62). This parenting style has its roots in the seventeenth and eighteenth century Puritanical belief system that finds virtue in unquestioning obedience (Baumrind, 1978). Authoritarian parents are often emotionally detached, but restrictively controlling. They use force and punitive measures in order to curb their children’s self-will. Although they are consistent in discipline, these parents are less likely to use rational methods of control (Baumrind, 1973). Authoritarian parents often use power assertion, which involves the idea that the parent should be obeyed because she is bigger, more significant, and more powerful than the child. The power assertion used to guide their children; however, leaves no room for questioning or discussion. In an early study by Baumrind (1973), authoritarian parents admitted to frightening their children as a means of control. There is also some evidence that suggests
authoritarian parents attempt to control their children’s behavior through the use of guilt induction, withdrawal of love, or shaming (McCord, 1996).

While children of authoritarian parents show high levels of obedience, research has shown this parenting style to also produce some negative outcomes in children’s development, such as low levels of self-concept (Lamborn, et al., 1991) and poor adjustment at school (Shumow et al., 1998). This parenting style has been negatively associated with academic achievement, expressiveness, and independence in children (Hill, 1995; Shumow et al., 1998). Children and adolescents from authoritarian families tend to perform moderately well in school and be uninvolved in problem behavior (Weiss & Schwarz, 1996), but they have poorer social skills, lower self-esteem, and higher levels of depression (Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993).

Rigid, authoritarian parenting style is more likely to decrease the likelihood for value transmission because it often creates distance between parent and child. Since relatedness or closeness plays such an important role in the process of internalizing values, adolescents of authoritarian parents often do not internalize the values of the parents due to a lack of relatedness caused by this parenting style (Schonpflug, 2001).

1.3.1.3 Authoritative Parenting Style

Authoritative parents are both demanding and responsive. Baumrind suggested that, "They monitor and impart clear standards for their children’s conduct. They are assertive, but not intrusive and restrictive. Their disciplinary methods are supportive, rather than punitive” (Baumrind, 1973, p. 62). According to Baumrind, these parents want their children to be assertive as well as socially responsible, self-regulated and cooperative (Baumrind, 1973).
Authoritative parenting provides a balance between authoritarian and permissive parenting. Authoritative parents use reasoning and consistency in interactions with their children, placing high value on verbal give-and-take (Baumrind, 1978). These parents are more likely to use positive reinforcement and induction to guide their children. Induction involves explaining reasons and consequences to aid children in forming and internalizing the concepts of right and wrong. Authoritative parents communicate clearly with their children, and they encourage their children’s independent strivings (Baumrind, 1973). Contrary to the previously described parenting styles, “authoritative discipline tends to foster in children a particular kind of social competence which is associated with success in Western society” (Baumrind, 1978, p. 245).

Authoritative parenting has been associated with numerous positive child outcomes, such as self-regulation, high social competence, positive social adjustment, and low psychological and behavioral dysfunction (Grolnick & Ryan, 1989; Lamborn, et al., 1991). Hill (1995) found authoritative parenting to be positively correlated with organization, achievement, and intellectual orientation in children. Additionally, children of authoritative parents possess higher levels of autonomy than children of authoritarian and permissive parents (Deslandes, 2000). Just as authoritative parents appear to be able to balance their conformity demands with their respect for their children’s individuality, children from authoritative homes appear to be able to balance the claims of external conformity and achievement demands with their need for individuation and autonomy.

Grusec, Goodnow, and Kuczynski (2000) found that the authoritative style of parenting is the most effective for the transmission and internalization of values in children and adolescents. Grusec, Goodnow, and Kuczynski (2000) consider warmth, consistency, and responsiveness the key elements that make the authoritative parenting style conducive to the transmission of values.
Research also indicates relatedness or closeness is an imperative key to the process of internalizing values from one’s environment (Niemiec et al., 2006; Ryan & Deci, 2000). If a parent is more responsive to their child’s needs, the child tends to become more willing to comply with the parent’s demands and rules. Furthermore, if parents are more responsive, their adolescents may become more likely to view them as relevant role models; thus, these adolescents may choose to act in a similar way to their parents. Schonpflug (2001) proposes a more empathic parenting style, where positive emotional interactions exist between the parent and child, making value transmission more likely.

1.3.1.4 Comparison between Parenting Styles

One key difference between the three types of parenting is in the dimension of psychological control. This difference is reflected by significant negative correlations between the authoritative style and authoritarian and permissive styles (e.g., Alizadeh, Abu Talib, Adbullah, & Mansor, 2011; Buri, 1991). Psychological control refers to attempts that intrude into the psychological and emotional development of the child by the parent (Baumrind, 1991; McKay, 2006). Permissive parents make few attempts at control. On the other hand, both authoritarian and authoritative parents place high demands on their children and expect their children to behave appropriately and obey parental rules. Authoritarian parents expect their children to accept their values, reasons and goals without questioning. Whereas, authoritative parents are open to more give and take with their children; they make greater use of explanations, and listen to their children’s opinions (McKay, 2006). According to Baumrind (1991), authoritative and authoritarian parents are equally high in behavioral control; however,
authoritative parents tend to be low in psychological control, while authoritarian parents tend to be high.

One key difference between the permissive and authoritative styles is the level of demandingness. Permissive parents are less demanding and allow their children to develop on their own. Permissive parents are likely to accept their children’s self-regulation methods. Whereas authoritative parents tend to be more demanding and to have clear expectations, while still being responsive and encouraging towards the child. Meyer (2004) found that young adults who reported having an authoritative parent, reported being significantly more cheerful and less depressed than those reporting a permissive parenting style. Young adults with authoritative parents reported they were more energetic and reported having more satisfying and interesting lives than did those participants who reported having experienced a permissive parenting style. On the other hand, the young adults with permissive parents reported having less emotional behavior and anxiety than did young adults with authoritative parents (Meyer, 2004).

1.4 Current Project and Rationale

Previous literature suggests emerging adulthood is an important period for value development. However, values research has primarily focused on adolescence. It is necessary to study the factors that influence values in young adults. Given that previous research indicates parenting styles have a major impact on youth’s development, it is logical to hypothesize parenting styles impact value development in emerging adults. However, this relationship has not been previously examined. Further, the definition of values and how they are examined varies greatly from one theory to the next. Empirical evidence supports the importance of valuing with the ACT model. Several studies have demonstrated valuing is negatively correlated
with various symptoms of psychopathology (Adcock, Murrell, & Woods, 2007; Plumb et al. 2007; VanDyke, Rogers, & Wilson, 2006; Taravella, 2010; McCracken & Yang, 2006). These findings indicate it is imperative for research to be conducted examining values in an emerging adulthood sample, to gain better understanding and aid in treatment and intervention. An ACT approach to values may lead to new and useful understanding and perspective of value development in emerging adulthood. The aim of the present study was twofold. The first goal was to determine if parenting style was related to the degree to which values in an emerging adult, college student, sample are freely chosen (i.e., intrinsic) versus based on external circumstances (i.e., extrinsic). The second goal was to examine the relationships between parenting styles, parent-child relationship and values transmission. Based on the previous literature, the following hypotheses were explored:

1.4.1 Hypotheses

1. Parenting styles and quality of parent-child relationship would be correlated.
   a. Authoritarian parenting style would be negatively correlated with quality of parent-child relationship.
   b. Authoritative parenting style would be positively correlated with quality of parent-child relationship.

2. Parenting style would be correlated with degree of intrinsic and extrinsic values, or the degree values are freely chosen.
   a. Authoritarian parenting style would be negatively correlated with the degree values are freely chosen.
   b. Authoritative parenting style would be positively correlated with the degree values are freely chosen.
3. Quality of parent-child relationship would be positively correlated with degree the degree values are freely chosen.

4. Parenting style would impact the relationship between quality of parent-child relationship and the degree values are freely chosen.
CHAPTER 2

METHOD

2.1 Participants

Pedhauzer (1982) suggested a recommended sample size for a given path analysis is 20 times the number of parameters included in the model. The model proposed included a total of 7 path coefficients and so applying Pedhauzer’s recommendation it was estimated that a minimum sample of \( N = 300 \) would be sufficient to test the hypothesized model. A sample of 454 undergraduate students were recruited from UNT Research Participant Pool utilizing the Sona system, UNT’s online system used to recruit undergraduate research participation. Information about the age, gender, ethnicity, and other demographic variables describing these participants can be found in Table 2.1. The Sona system allows students to register for studies through the internet. Inclusion into the study was determined by meeting the following criteria: undergraduates who are (a) English-speaking and (b) between the ages of 18 and 25 years old. Selection criteria limited participants to ages 18 to 25 in an effort to be consistent with the age ranges for emerging adulthood suggested in the literature. The undergraduate participants completed a series of measures [i.e., completion of a demographics questionnaire, Parental Authority Questionnaire (on both primary male caregiver and primary female caregiver), Quality of Relationships Inventory (on both primary male caregiver and primary female caregiver), and the Personal Values Questionnaire, (to be described more fully later in this manuscript).
Table 2.1

*Descriptive Statistics*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong> (<em>n</em> = 454)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>292</td>
<td>64.3%</td>
</tr>
<tr>
<td>Male</td>
<td>149</td>
<td>32.8%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong> (<em>n</em> = 454)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American (Black)</td>
<td>51</td>
<td>11.2%</td>
</tr>
<tr>
<td>Asian (Pacific Islander)</td>
<td>38</td>
<td>8.4%</td>
</tr>
<tr>
<td>Biracial</td>
<td>22</td>
<td>4.8%</td>
</tr>
<tr>
<td>European American (White)</td>
<td>239</td>
<td>52.6%</td>
</tr>
<tr>
<td>Hispanic (Latino, Latina, Mexican)</td>
<td>81</td>
<td>17.8%</td>
</tr>
<tr>
<td>Middle Eastern/Arab</td>
<td>6</td>
<td>1.7%</td>
</tr>
<tr>
<td>Native American (Indian)</td>
<td>3</td>
<td>0.7%</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>3.1%</td>
</tr>
<tr>
<td><strong>Marital Status</strong> (<em>n</em> = 454)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>430</td>
<td>94.7%</td>
</tr>
<tr>
<td>Married</td>
<td>5</td>
<td>1.1%</td>
</tr>
<tr>
<td>Other</td>
<td>19</td>
<td>4.2%</td>
</tr>
<tr>
<td><strong>Caregiver Structure</strong> (<em>n</em> = 453)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father and Mother</td>
<td>366</td>
<td>80.6%</td>
</tr>
<tr>
<td>Stepfather and Mother</td>
<td>26</td>
<td>5.7%</td>
</tr>
<tr>
<td>Granfather and Grandmother</td>
<td>61</td>
<td>11.7%</td>
</tr>
</tbody>
</table>
2.2 Measures

All participants received the following instruments in electronic format, with the requirement to complete all items to receive course credit for participation. The participants in the study were administered a demographics questionnaire (Appendix B), Personal Values Questionnaire (PVQ), Parental Authority Questionnaire (PAQ), and the Quality of Relationships Inventory (QRI). Participants completed the demographics questionnaire first, in order to help them to begin thinking about self-relevant variables. Next, while participants were considering personally relevant content, they completed the PVQ. Given that the PVQ is lengthy, it was placed early in the protocol to prevent fatigue effects. Participants then completed the PAQ and QRI about their female caregivers, since the female caregiver is typically the primary caregiver. Lastly, participants completed the PAQ and QRI about their male caregivers. The internet based program FluidSurveys was used to construct the electronic version of the instruments that all participants completed.

2.2.1 Demographics

Demographic information was collected from each participant using a brief list of questions regarding age, marital status, ethnicity, education in years, employment status, family income, and parental structure in which the individual was raised (see Appendix B). Age, marital status, ethnicity, education in years, employment status, and family income were chosen to examine possible differences between groups. These demographic variables have been associated with valuing and values transmission before. The parental structure item was asked in order to check data consistency with responses on other measures.
2.2.2 Parental Authority Questionnaire (PAQ)

The PAQ is a 30-item questionnaire used to measure Baumrind's three prototypes of parental authority: permissiveness, authoritarianism, and authoritativeness (Buri, 1989). The PAQ is composed of three subscales: permissive, authoritarian, and authoritative scores are derived for both the mother and the father. Responses to each item are chosen from a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5). Thus, the PAQ produces six separate scores for each participant: mother's permissiveness, mother's authoritarianism, mother's authoritativeness, father's permissiveness, father's authoritarianism, and father's authoritativeness. The scores on each of these subscales can range from 10 to 50. The higher the score on a subscale, the greater the participant's perceived presence of the parenting style. In the original validation study, the Cronbach (1951) coefficient alpha values for each of the six PAQ scales are as followed: .75 for mother's permissiveness, .85 for mother's authoritarianism, .82 for mother's authoritativeness, .74 for father's permissiveness, .87 for father's authoritarianism, and .85 for father's authoritativeness (Buri, 1989). The reliability of the PAQ was found to be .77 to .92 in a test re-test check over a two-week period of time (Buri, 1991). Validity for the PAQ was found to be .74 to .87 for the subscales (Buri, 1991).

In the current study, the authoritarian, authoritative, and permissive subscales had good internal consistency for both the female and male caregivers. In regards to the female caregivers, the alpha for the permissive subscale was .82, the alpha for the authoritarian was .89, and the alpha for the authoritative subscale was subscale was .88. In regards to the male caregivers, the alpha for the permissive subscale was .85, the alpha for the authoritarian .91, and the alpha for the authoritative subscale was subscale was .92.
2.2.3  The Quality of Relationships Inventory (QRI)

The QRI is a 25-item questionnaire with a 4-point Likert-type scale with responses ranging from 1 *not at all* to 4 *very much*, which measures the quality and supportive nature of the relationship between parent and child (Pierce, Sarason, & Sarason, 1991). The QRI is made of three subscales: support (7 items), depth (6 items), and conflict (12 items inversely scored). Bergen-Schapeler (2006), found high internal consistency between the support and depth subscales justifying the combining of the two subscales to create a total score, called the emotional support score. The emotional support score was computed by averaging the items from the support and depth subscales and then summing them. The QRI has been found to have adequate internal consistency with Cronbach’s alphas ranging from .70s to .90s across subscales (Pierce, Sarason, Solky-Butzel, & Nagle, 1997). When the QRI was used to measure internal consistency across a sample of adolescents and their parents, the average internal consistencies were 0.80 for the support scale, 0.89 for the conflict scale, and 0.69 for the depth scale (Ptacek, Pierce, Eberhardt, & Dodge, 1999). The QRI also demonstrates an ability to discriminate the relationship specific support from more general social support (Pierce, Sarason, & Sarason, 1991).

For the current study, the support, conflict, depth, and emotional support subscales had good internal consistency for both the female and male caregivers. For responses about female caregivers, the alpha for the support subscale was .90, the alpha for the conflict was .90, the alpha for the depth subscale was subscale was .87, and the alpha for the emotional support subscale was subscale was .90. In regards to the male caregivers, the alpha for the support subscale was .90, the alpha for the conflict .92, the alpha for the depth subscale was subscale was .86, and the alpha for the emotional support subscale was subscale was .93.
2.2.4 Personal Values Questionnaire (PVQ)

The PVQ is a self-report measure designed to assess valued actions and the rule-governed behavior reflected by those actions (Blackledge & Ciarrochi, 2006). Respondents are asked to identify valued actions in a free response format across nine domains: family relationships, friendships/social relationships, couples/romantic relationships, work/career, education-school/personal growth, recreation/leisure/sports, spirituality/religion, community/citizenship, and health/physical well-being. Following the identification within each domain, respondents are asked to respond to five statements about the type of behavior associated with the valued actions on a 5-point, Likert-like scale, ranging from 1, not at all for this reason to five, entirely for this reason. Behavior measured includes three major types: (1) compliance, valuing under the control of social reinforcement (i.e., “I value this because somebody else wants me to or thinks I ought to, or because someone else will like it if I do. I probably wouldn’t say I value this if I didn’t get some kind of praise or approval for it”), (2) avoidance, endorsing a value to avoid shame, guilt, or anxiety that would arise if it were not endorsed (i.e., “I value this because I would feel ashamed, guilty, or anxious if I didn’t”), and (3) increasing the worth of an object or event through cognitive or verbal behavior (i.e., “I value this because I view it as important, whether or not others agree. Although this value may have been taught to me by others, now it is my own heartfelt value” and “I value this because doing these things makes my life better, more meaningful, and/or more vital”) (Blackledge, 2005). Subsequent items ask respondents to rate the importance of each value and the success they have had living in accordance with each given value. An ACT case conceptualization indicates that the first two types of reasons for valuing are pathological, while the third is consistent with a more effective approach. Therefore, in the current study, a PVQ values purity score was calculated by subtracting the scores on the first and
second types from scores on the third type, representing the extent to which valuing behavior is freely chosen.

There is limited psychometric data on the PVQ; however, this measure is the best available measure at this time to assess the degree to which values are freely chosen. The measure was developed from an ACT theoretical and treatment model. The PVQ allows one to differentiate between rule-governed and freely chosen values while other measures (i.e. the VLQ) do not allow for this differentiation. Further, it does not require participants to rank values as many previous measures of values do. The ranking system used in other value measures is inconsistent with ACT since one value is not necessarily more important than another value.

Valuing is ongoing action and value-consistent goals shift given contextual constraints (Hayes et al., 1999). For instance, one may both highly value one’s family and education; however, if a major assignment is due shortly then one might choose to miss a family dinner to work on the assignment. This choice does not mean the individual values education more than their family. Rather, given the contextual factors of the current situation, the individual chose to act consistently with their education value.

The VLQ, which is commonly used in ACT literature, was not the best available measure for the current study. While the VLQ is ACT-consistent and does not require ranking, it has only moderate psychometric support (Wilson, Sandoz, Kitchens, & Roberts, 2010), it does not assess the types of reasons for valuing, and it does not provide the combination of qualitative and quantitative information that the PVQ affords. Thus, the PVQ was chosen to be the best available measure for the purposes of this study. It was adapted from the Kennon Sheldon’s Personal Strivings measure (Blackledge, & Ciarrochi, 2006; Sheldon & Elliot, 1999) which provided a template for two versions: the PVQ and the Social Values Survey (SVS), a shortened form that
assesses for values in the social, family, and couples relationship domains. The SVS was validated on a sample of 99 undergraduate students at the University of Wollongong in Australia (Blackledge et al., 2006). Corrected item-total correlations for all items in the three domains ranged from .09 to .55 and an internal consistency reliability coefficient for the whole measure of $\alpha = .76$ was obtained. In the Blackledge validation study, the SVS domains significantly negatively correlated with psychological distress (-.22 to -.32) as measured by the Brief Symptom Inventory (BSI; Derogatis, 1993), and significantly positively correlated with the Purpose in Life Scale (.21 to .32) (PIL; Marsh, Smith, Piek, & Saunders, 2003). The measure positively correlated with psychological flexibility (.23 to .32) as measured by the AAQ-II (Bond, Hayes, Baer, Carpenter, Orcutt, Waltz, et al., 2005) and with life satisfaction (.23 to .37) as measured by the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) (Blackledge et al., 2006). Furthermore, in a recent study with 283 undergraduates, a high internal consistency reliability coefficient for values purity was obtained, $\alpha = .90$ (Hernandez, 2012). For the current study, the Purity Value Scale had good internal consistency with an alpha of .91.

2.3 Procedures

Consent was acquired using procedures approved by the University of North Texas Institutional Review Board (see Appendix A). Participants were recruited by posts on the University of North Texas’ Sona system. The purpose, risks, and benefits of the study were outlined and available for the participants to review prior to consenting to the study. Participants consented for the study by providing their electronic signature and indicating that they understood the risks and benefits of the study. Contact information for the principal investigator
and research assistant were included on the informed consent if participants had questions about the study.

Participants received 4 credits for psychology courses at UNT, either to fulfill part of their class requirements or for extra credit. In order to register for the study, students logged on to the Sona system using their UNT EUID and password. UNT students had the opportunity to choose to volunteer and participate in this study among other studies also available on the Sona system. Data was collected from participants using an online survey engine called FluidSurvey; all the above mentioned measures were uploaded to the online survey. The survey allowed participants to anonymously answer questions and revisit their answers to change them if so desired. Participants received half a Sona credit for every half hour of their participation; this study took approximately 2 hours to complete. Participants were allowed to withdraw from the study at any time without consequences to their courses. Data are stored on password-protected computers in a locked laboratory.
CHAPTER 3

RESULTS

3.1 Descriptive Statistics

Descriptive statistics were calculated for age, gender, relationship status, ethnicity, education level, employment status, and annual income as reported on the demographic questionnaire. Additionally, percentages of self-reported parental structure (i.e., raised by one parent, both parents, grandparents, etc.) were calculated. It is important to note that no statistically significant differences were found among age, gender, marital status, ethnicity, education in years, employment status, and family income or between these variables and the dependent variables in either sample.

Age of participants ranged from 18 to 25, with a mean age of 19.86 (SD = 1.7). Ethnic groups represented by participants included: African American (Black) ($n = 51$), Asian (Pacific Islander) ($n = 38$), Biracial ($n = 22$), European American (White) ($n = 239$), Hispanic (Latino, Latina, Mexican) ($n = 81$), Middle Eastern/Arab ($n = 6$), Native American (Indian) ($n = 3$), and other ($n = 14$) (see Table 2.1). With regards to marital status, 94.7% of the sample was single, 1.1% was married, and 4.2% of the sample identified as having a marital status of other. Within this sample, a wide range of education levels, employment statuses, and annual incomes were represented (see Table 3.1). In regard to obtained level of education, 0.2% obtained a GED, 18.7% obtained some high school education, 26.2% obtained an undergraduate freshman level of education, 17.8% obtained an undergraduate sophomore level of education, 23.6% an undergraduate junior level of education, and 13.4% obtained an undergraduate senior level of education. In regard to employment status, 53.5% were unemployed, 43.4% were employed part time, and 2.9% were employed full time. The
reported annual income of the sample consisted of 90.1% having an annual income between $0-$20,000, 5.7% reported an annual income of $20,001-$40,000, 1.3% reported an annual income of $40,001-$60,000, 1.5% reported an annual income of $60,001-$80,000, 0.4% reported an annual income of $80,001-$100,000, and 0.4% reported an annual income of $100,001 and above.

Table 3.1

SES Descriptive Statistics

<table>
<thead>
<tr>
<th>Highest Level of Education (n= 454)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>GED</td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>High School</td>
<td>85</td>
<td>18.7%</td>
</tr>
<tr>
<td>Undergraduate Freshman</td>
<td>119</td>
<td>26.2%</td>
</tr>
<tr>
<td>Undergraduate Sophomore</td>
<td>81</td>
<td>17.8%</td>
</tr>
<tr>
<td>Undergraduate Junior</td>
<td>107</td>
<td>23.6%</td>
</tr>
<tr>
<td>Undergraduate Senior</td>
<td>61</td>
<td>13.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment Status (n= 453)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time</td>
<td>13</td>
<td>2.9%</td>
</tr>
<tr>
<td>Part Time</td>
<td>197</td>
<td>43.4%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>243</td>
<td>53.5%</td>
</tr>
</tbody>
</table>

(table continues)
**SES Descriptive Statistics (continued)**

<table>
<thead>
<tr>
<th>Annual Income (n= 453)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0- 20,000</td>
<td>409</td>
<td>90.1%</td>
</tr>
<tr>
<td>20,001- 40,000</td>
<td>26</td>
<td>5.7%</td>
</tr>
<tr>
<td>40,001- 60,000</td>
<td>6</td>
<td>1.3%</td>
</tr>
<tr>
<td>60,001- 80,000</td>
<td>7</td>
<td>1.5%</td>
</tr>
<tr>
<td>80,001- 100,000</td>
<td>2</td>
<td>0.4%</td>
</tr>
<tr>
<td>100,001 and above</td>
<td>2</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Concerning the caregiver structure of the sample, the majority of the sample was raised by their mother and father (80.6%). Additionally, 5.7% of the sample was raised by their stepfather and mother, 1.8% by their grandfather and grandmother, and 11.7% identified as their caregiver structure as other (see Table 2.1). Prior to completing the Parental Authority Questionnaire and Quality of Relationship Inventory, 83.5% reported having a primary female caregiver and 68.3% reported having a male caregiver.

3.2 Measures

Means, standard deviations, and internal consistency reliability coefficients for both the female caregivers (Table 3.2) and the male caregivers (Table 3.3) were calculated for the following measures: PAQ (Authoritarian, Authoritative, and Permissive subscales), QRI (Emotional Support subscale), and PVQ (Purity Value subscale). Additionally, the ranges, minimum, and maximum scores for each measure are presented (see Table 3.4).
Table 3.2

**Female Caregiver Descriptive Statistics and Correlations Among Key Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authoritarian</td>
<td>32.02</td>
<td>8.2</td>
<td>(.89)</td>
<td>-.37**</td>
<td>-.51**</td>
<td>-.38**</td>
<td>-.59**</td>
</tr>
<tr>
<td>2. Authoritative</td>
<td>35.58</td>
<td>7.62</td>
<td>(.88)</td>
<td>.32**</td>
<td>.64**</td>
<td>.47**</td>
<td></td>
</tr>
<tr>
<td>3. Permissive</td>
<td></td>
<td></td>
<td>(.82)</td>
<td>.22**</td>
<td>.33**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotional Support</td>
<td>6.47</td>
<td>1.41</td>
<td>(.90)</td>
<td></td>
<td></td>
<td>.54**</td>
<td></td>
</tr>
<tr>
<td>5. Value Purity</td>
<td>31.17</td>
<td>30.87</td>
<td></td>
<td></td>
<td></td>
<td>(.91)</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **p < .01 (two-tailed).*

Table 3.3

**Male Caregiver Descriptive Statistics and Correlations Among Key Variables**

<table>
<thead>
<tr>
<th>Variables</th>
<th>M</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authoritarian</td>
<td>30.98</td>
<td>7.75</td>
<td>(.89)</td>
<td>-.32**</td>
<td>-.48**</td>
<td>-.24**</td>
<td>-.07</td>
</tr>
<tr>
<td>2. Authoritative</td>
<td>33.81</td>
<td>9.71</td>
<td>(.92)</td>
<td>.41**</td>
<td>.65**</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>3. Permissive</td>
<td>25.42</td>
<td>7.60</td>
<td>(.82)</td>
<td>.30**</td>
<td>-.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Emotional Support</td>
<td>6.06</td>
<td>1.41</td>
<td>(.93)</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Value Purity</td>
<td>31.17</td>
<td>30.87</td>
<td></td>
<td></td>
<td></td>
<td>(.91)</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* **p < .01 (two-tailed).*
Table 3.4

Measure Minimum, Maximum, and Range

<table>
<thead>
<tr>
<th>Measure</th>
<th>Lowest Score</th>
<th>Highest Score</th>
<th>Possible Range</th>
<th>Actual Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female Caregivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAQ- Authoritarian</td>
<td>10</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>PAQ- Authoritative</td>
<td>10</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>PAQ- Permissive</td>
<td>10</td>
<td>34</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td><strong>Female Caregivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRI- Emotional Support</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>Male Caregivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAQ- Authoritarian</td>
<td>10</td>
<td>44</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>PAQ- Authoritative</td>
<td>10</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>PAQ- Permissive</td>
<td>10</td>
<td>46</td>
<td>44</td>
<td>36</td>
</tr>
<tr>
<td><strong>Male Caregivers</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>QRI- Emotional Support</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>PVQ- Purity Score</strong></td>
<td>-62</td>
<td>72</td>
<td>144</td>
<td>134</td>
</tr>
</tbody>
</table>

Note: PAQ = Parental Authority Questionnaire, QRI = Quality of Relationship Inventory, and PVQ = Personal Values Questionnaire

3.3 Missing Data and Assumption Testing

Prior to statistical analysis, the obtained data were uploaded from the data collection website, FluidSurvey, into IBM SPSS Statistics 20 and examined statistically and visually for missing values, outliers, and the general integrity of the data set. Distribution and pattern of missing data were evaluated based on procedures outlined in Tabachnick and Fidell (2007). Prior to conducting analyses, assumptions corresponding to each analysis were assessed using graphic exploration of the data as well as statistical analysis. Using the descriptives function, z-scores were calculated, which did not reveal any outliers among continuous variables. The pattern of missing data was analyzed, including examination of absolute number of missing data points and their percentages. Only a few cases of demographic information were missing and the missing data appeared to be random in nature. There were
13 cases where gender was not identified, 2 cases where income level was not identified, 3 cases where ethnicity was not identified, and 1 case where the parental structure in which the individual was raised was not identified. Additionally, many participants did not have either a female or male primary caregiver; thus, these participants were unable to complete data about both a female and male primary caregiver. Specifically, 16.3% of the sample indicated they did not have a primary female caregiver and 31.7% indicated they did not have a primary male caregiver. Thus, since only demographic information was missing and it appeared random in nature these participants were retained for the analyses. The assumptions of normality, homoscedasticity, linearity and independence were met. Thus, no transformations of the data were necessary. Additionally, before hypothesis testing began, experiment wise error was controlled for using Bonferroni correction. The overall alpha level was divided by the number of tests run for each sample. The \( p \) value for significance was thus set at equal to or less than .01 (.05 was divided by 4 for each of the regression analysis to account for familywise error).

3.4 Hypothesis Testing

Path analysis procedures were conducted to examine the hypotheses. First using the statistical program IBM SPSS Statistics 20, a series of regression equations were constructed to generate coefficients \( (p_{ij}) \) for each hypothesized association. The path model was then examined for fit using Amos 22 in IBM SPSS Statistics 20. A summary of the hypothesized causal model is shown in Figure 3.1. As suggested by Schumacker and Lomax (2004), the model was over-identified, with theory guiding relationships between all of the variables and the model having two degrees of freedom. There are 13 free parameters: 5 path coefficients, 2 for the equations’
(from IV’s to the quality of parent-child relationship and from IV’s and the quality of parent-child relationship measure to purity of values) error variances, three to account for correlations between individual variables, and three for the variances associated with individual variables. Two potential direct pathways from permissive parenting are not drawn due to insufficient data, or inadequate previous research that would be needed in order to support a theoretical path. In the proposed path analysis model parenting style (authoritarian and authoritative) are the exogenous variables, or factors which are caused by influences outside of the model, and quality of the parent-child relationship and value purity are the endogenous variables (or the factors that are caused by variables examined within the model). Given previous literature, it was hypothesized that all of the exogenous variables would be correlated with each other. Furthermore, it was predicted that parenting types would directly affect both quality of parent-child relationship and valuing. Additionally, a correlation matrix was performed to examine the correlation between the variables parenting style (PAQ), quality of parent-child relationships (QRI), and values purity (PVQ) for both female and male caregivers. Multicollinearity was assessed to further assure assumptions had been met (see Tables 3.5 and 3.6). Multicollinearity was not an issue and all variables were well below the cutoffs (i.e. 10 = high multicollinearity, 5 = moderate multicollinearity, and 2 = multicollinearity may become an issue).
Figure 3.1 Hypothesized path model.

Note: PVQ = Parental Authority Questionnaire; ESS_QRI = Emotional Support Scale of Quality of Relationship Inventory; VPS_PVQ = Value Purity Score of Personal Values Questionnaire.
Table 3.5

Female Caregiver Multicollinearity Statistics (VIF Scores)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authoritarian</td>
<td>--</td>
<td>1.00</td>
<td>1.62</td>
<td>1.21</td>
</tr>
<tr>
<td>2. Authoritative</td>
<td>--</td>
<td>1.62</td>
<td>1.74</td>
<td></td>
</tr>
<tr>
<td>3. Emotional Support</td>
<td></td>
<td>--</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td>4. Value Purity</td>
<td></td>
<td></td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>

Table 3.6

Male Caregiver Multicollinearity Statistics (VIF scores)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Authoritarian</td>
<td>--</td>
<td>1.00</td>
<td>1.11</td>
<td>1.11</td>
</tr>
<tr>
<td>2. Authoritative</td>
<td>--</td>
<td>1.11</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
<td>3. Emotional Support</td>
<td></td>
<td>--</td>
<td>1.73</td>
<td></td>
</tr>
<tr>
<td>4. Value Purity</td>
<td></td>
<td></td>
<td></td>
<td>--</td>
</tr>
</tbody>
</table>

3.4.1 Hypothesis Testing and Results with Female Caregivers

3.4.1.1 Hypothesis 1a

In order to assess Hypothesis 1a a correlation matrix was conducted (see Table 3.2).

Results supported the hypothesis that the authoritarian parenting style was negatively correlated with quality of parent-child relationship ($r = -.38, p < .01$).

3.4.1.2 Hypothesis 1b

In order to assess Hypothesis 1b a correlation matrix was conducted (see Table 3.2).

Results supported the hypothesis that the authoritative parenting style was positively correlated with quality of parent-child relationship ($r = .64, p < .01$).
3.4.1.3 Hypothesis 2a

In order to assess Hypothesis 2a a correlation matrix was conducted (see Table 3.2). Results supported the hypothesis that the authoritarian parenting style was negatively correlated with degree of intrinsic and extrinsic values, or the degree values are freely chosen ($r = -.59, p < .01$).

3.4.1.4 Hypothesis 2b

In order to assess Hypothesis 2b a correlation matrix was conducted (see Table 3.2). Results supported the hypothesis that the authoritative parenting style was positively correlated with degree of intrinsic and extrinsic values, or the degree values are freely chosen ($r = .47 p < .01$).

3.4.1.5 Hypothesis 3

In order to assess Hypothesis 3 a correlation matrix was conducted (see Table 3.2). Results supported the hypothesis that the quality of parent-child relationship would be positively correlated with degree the degree values are freely chosen ($r = .54 p < .01$).

3.4.1.6 Hypothesis 4

Next using the statistical program IBM SPSS Statistics 20, a series of regression equations were constructed to generate coefficients ($p_{ij}$) for each hypothesized association. The path model was then examined for fit using Amos 22 in IBM SPSS Statistics 20. The model for female caregivers was examined first (see Figure 3.2).
Note: PVQ = Parental Authority Questionnaire; ESS_QRI = Emotional Support Scale of Quality of Relationship Inventory; VPS_PVQ = Value Purity Score of Personal Values Questionnaire; **p < .001

Figure 3.2 Path model for female caregivers.
The first regression analysis for this model used the Emotional Support Score on the Quality of Relationships Inventory as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian and Authoritative) as the predictors. Results of this regression were significant \((R^2 = .66, F(2, 377) = 161.62, p < .001)\). Specifically, authoritarian parenting style significantly predicted \((\beta = -.17, B = -.03, p < .001)\) and authoritative parenting style significantly predicted \((\beta = .57, B = .11, p < .001)\) closeness of the parent-child relationship.

The second regression analysis for this model used the Purity Value Score on the Personal Values Questionnaire as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian and Authoritative) and the Emotional Support Score on the Quality of Relationships Inventory as the predictors. Results of this regression were significant \((R^2 = .69, F(3, 376) = 111.13, p < .001)\). Specifically, authoritarian parenting style \((\beta = -.43, B = -1.70, p < .001)\), authoritative parenting style \((\beta = .12, B = .53, p < .001)\), and the Emotional Support Score \((\beta = .30, B = 6.80, p < .001)\) significantly predicted the degree to which values are intrinsically chosen. Thus, parenting styles and closeness of the parent-child relationship have direct effects on the degree to which values are intrinsically or extrinsically chosen. Approximately 69% of the variance in the degree to which values are intrinsically or extrinsically chosen was accounted for by the model.

Path coefficients may be used to decompose correlations in the model into direct and indirect effects, corresponding to direct and indirect paths reflected in the arrows in the model. Furthermore, results show the direct effect of authoritarian parenting style on value purity is -.43 and the indirect effect of authoritarian parenting through the quality of the parent-child relationship is -.05. The total causal effect is computed by summing the direct effect and the indirect effect. Thus, the total causal effect is .48. Results show the direct effect of authoritative
parenting style on value purity is .12 and the indirect effect of authoritative parenting through the quality of the parent-child relationship is .17. The total causal effect is computed by summing the direct effect and the indirect effect. Thus, the total causal effect is .29.

Finally the fit of the model was analyzed utilizing AMOS 22. Several indices of model fit were calculated to assess the model’s ability to reproduce the observed correlations in the sample in accordance with the recommendations of Kline (2011). Results indicated that the proposed path model was indeed a good fit as indicated by several indices of model fit. The RMSEA measure of fit is currently the most popular measure of model fit. MacCallum, Browne and Sugawara (1996) have used 0.01, 0.05, and 0.08 to indicate excellent, good, and mediocre fit respectively. The RMSEA measure of fit was .03 indicating the model was between an excellent and good fit. The NFI was also used. This index was the first measure of fit proposed in the literature (Bentler & Bonett, 1980) and it is an incremental measure of fit. For the NFI, a value between .90 and .95 is considered marginal, above .95 is good, and below .90 is considered to be a poor fitting model. Results of the NFI indicate the model of fit is good (NFI = .996). The chi-square test for model fit was non-significant [$\chi^2 = (2) = 2.58, p > .05$] suggesting that the hypothesized model was reliably better than its complimentary just-identified version (i.e., including all possible paths).

3.4.2 Hypothesis Testing and Results with Male Caregivers

3.4.2.1 Hypothesis 1a

In order to assess Hypothesis 1a a correlation matrix was conducted (see Table 3.3). Results supported the hypothesis that the authoritarian parenting style was negatively correlated with quality of parent-child relationship ($r = -.24, p < .01$).
3.4.2.2 Hypothesis 1b

In order to assess Hypothesis 1b a correlation matrix was conducted (see Table 3.3). Results supported the hypothesis that the authoritative parenting style was positively correlated with quality of parent-child relationship \((r = .65, p < .01)\).

3.4.2.3 Hypothesis 2a

In order to assess Hypothesis 2a a correlation matrix was conducted (see Table 3.3). Results did not support the hypothesis that the authoritarian parenting style was negatively correlated with degree of intrinsic and extrinsic values, or the degree values are freely chosen \((r = -.07)\).

3.4.2.4 Hypothesis 2b

In order to assess Hypothesis 2a a correlation matrix was conducted (see Table 3.3). Results did not support the hypothesis that the authoritative parenting style was positively correlated with quality of parent-child relationship \((r = .07)\).

3.4.2.5 Hypothesis 3

In order to assess Hypothesis 3 a correlation matrix was conducted (see Table 3.3). Results did not support the hypothesis that the quality of parent-child relationship would be positively correlated with degree the degree values are freely chosen \((r = .09)\).
3.4.2.6 Hypothesis 4

Next using the statistical program IBM SPSS Statistics 20, a series of regression equations were constructed to generate coefficients \( (p_{ij}) \) for each hypothesized association. The path model was then examined for fit using Amos 22 in IBM SPSS Statistics 20. The model for male caregivers was examined (see Figure 3.3).

The first regression analysis for this model used the Emotional Support Score on the Quality of Relationships Inventory as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian and Authoritative) as the predictors. Results of this regression were significant \( (R^2 = .42, F (2, 307) = 129.05, p < .001) \). Specifically, authoritarian parenting style did not significantly predict \( (\beta = -.04, B = -.01, p = .42) \) and authoritative parenting style significantly predicted \( (\beta = .64, B = .10, p < .001) \) closeness of the parent-child relationship.

The second regression analysis for this model used the Purity Value Score on the Personal Values Questionnaire as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian and Authoritative) and the Emotional Support Score on the Quality of Relationships Inventory as the predictors. Results of this regression were not significant \( (R^2 = .01, F (3, 306) = 1.06, p = .37) \). Specifically, authoritarian parenting style \( (\beta = -.05, B = -.21, p = .40) \), authoritative parenting style \( (\beta = .004, B = .01, p = .96) \), and the Emotional Support Score \( (\beta = .07, B = .01, p = .32) \) did not significantly predict the degree to which values are intrinsically chosen. Thus, authoritarian parenting style does not have a direct effect on the closeness of the parent-child relationship and it does not have a direct or indirect effect on the degree to which values are intrinsically or extrinsically chosen. The authoritative parenting style had a direct effect on the closeness of the parent-child relationship, but it did not have a direct or indirect effect on the degree to which values are intrinsically or extrinsically chosen. Finally, the
Note: PVQ = Parental Authority Questionnaire; ESS_QRI = Emotional Support Scale of Quality of Relationship Inventory; VPS_PVQ = Value Purity Score of Personal Values Questionnaire; **p < .001

*Figure 3.3* Path model for male caregivers.
closeness of the parent-child relationship did not have a direct effect on the degree to which values are intrinsically or extrinsically chosen.

Path coefficients may be used to decompose correlations in the model into direct and indirect effects, corresponding to direct and indirect paths reflected in the arrows in the model. Furthermore, results show the direct effect of authoritarian parenting style on value purity is -.05 and the indirect effect of authoritarian parenting through the quality of the parent-child relationship is -0.002. The total causal effect is computed by summing the direct effect and the indirect effect. Thus, the total causal effect is .05. Results show the direct effect of authoritative parenting style on value purity is .004 and the indirect effect of authoritative parenting through the quality of the parent-child relationship is .04. The total causal effect is computed by summing the direct effect and the indirect effect. Thus, the total causal effect is .04. Finally, the fit of the model was analyzed utilizing AMOS 22. As was done for analyses involving female caregivers, the model used for responses about male caregiver was tested for fit in several ways. Results of the NFI indicate the model fit is not good (NFI = .94). The chi-square test for model fit was significant \[ \chi^2 = (2) = 19.704, p < .001 \] and the value was far from zero, suggesting that the hypothesized model was not a good fit.

3.5 Exploratory Analyses

3.5.1 Results with Female Caregivers

Baumrind’s (1971) parenting style prototypes included the authoritarian, authoritative, and permissive parenting styles; however, Maccoby and Martin (1983) revised the permissive parenting style and found that this style has two sub-categories: permissive-indulgent and permissive-neglectful. Because the permissive parenting style has two sub-categories, and
because there is not currently a psychometrically sound measure to assess these two subcategories of the permissive parenting style, previous research did not allow for a specific hypothesis to be made regarding the permissive parenting style. However, exploratory analyses were conducted including the permissive parenting style in the regression model. The first regression analysis for this model used the Emotional Support Score on the Quality of Relationships Inventory as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian, Authoritative, and Permissive) as the predictors. Results of this regression were significant ($R^2 = .66$, $F (3, 376) = 95.81, p < .001$). Specifically, authoritarian parenting style significantly predicted ($\beta = -.20$, $B = -.04, p < .001$) and authoritative parenting style significantly predicted ($\beta = .59$, $B = .11, p < .001$) closeness of the parent-child relationship. However, permissive parenting style did not significantly predict ($\beta = -.07$, $B = -.02, p > .05$) closeness of the parent-child relationship.

The second regression analysis for this model used the Purity Value Score on the Personal Values Questionnaire as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian, Authoritative, and Permissive) and the Emotional Support Score on the Quality of Relationships Inventory as the predictors. Results of this regression were significant ($R^2 = .69$, $F (4, 375) = 83.16, p < .001$). Specifically, authoritarian parenting style ($\beta = -.42$, $B = -1.68, p < .001$), authoritative parenting style ($\beta = .12$, $B = .52, p < .05$), permissive parenting style ($\beta = .01$, $B = .06, p > .05$), and the Emotional Support Score ($\beta = .30$, $B = 6.82, p < .001$) significantly predicted the degree to which values are intrinsically chosen.

3.5.2 Results with Male Caregivers

Exploratory analyses for the male caregivers followed the above mentioned
rationale and procedures as the female caregivers. The first regression analysis for this model used the Emotional Support Score on the Quality of Relationships Inventory as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian, Authoritative, and Permissive) as the predictors. Results of this regression were significant ($R^2 = .42$, $F(3, 306) = 75.15$, $p < .001$). Specifically, authoritarian parenting style did not significantly predict ($\beta = -.02$, $B = -.004$, $p = .66$) the closeness of the parent-child relationship. The authoritative parenting style did significantly predict ($\beta = .63$, $B = .10$, $p < .001$) the closeness of the parent-child relationship. The permissive parenting style did not significantly predict ($\beta = .04$, $B = .007$, $p = .47$) the closeness of the parent-child relationship.

The second regression analysis for this model used the Purity Value Score on the Personal Values Questionnaire as the outcome and the Parental Authority Questionnaire Subscales (Authoritarian, Authoritative, and Permissive) and the Emotional Support Score on the Quality of Relationships Inventory as the predictors. Results of this regression were significant ($R^2 = .21$, $F(4, 305) = 3.54$, $p < .01$). Specifically, authoritarian parenting style ($\beta = -.14$, $B = -.60$, $p < .05$) significantly predicted the degree to which values are intrinsically chosen. The authoritative parenting style ($\beta = .06$, $B = .22$, $p = .44$) did not significantly predict the degree to which values are intrinsically chosen. The permissive parenting style ($\beta = -.22$, $B = -.92$, $p = .001$) significantly predicted the degree to which values are intrinsically chosen. Finally, the Emotional Support Score ($\beta = .08$, $B = -.92$, $p = .26$) did not significantly predict the degree to which values are intrinsically chosen.
3.6 Discussion

The present study had two aims. The first goal was to determine if parenting style was related to the degree to which values in an emerging adult, and college student, sample are freely chosen (i.e., intrinsic) versus based on external circumstances (i.e., extrinsic). The second goal was to examine the relationships between parenting styles, parent-child relationship and values transmission. Path analysis procedures were conducted to examine the hypotheses. First using the statistical program IBM SPSS Statistics 20, a series of regression equations were constructed to generate coefficients ($p_{ij}$) for each hypothesized associations. A summary of the hypothesized causal model is shown in Figure 3.1 and the path analysis results are displayed in Figure 3.2 and Figure 3.3.

3.6.1 Results with Female Caregivers

In the path analysis model, parenting style (authoritarian and authoritative) were the exogenous variables and the quality of the parent-child relationship and value purity were the endogenous variables. It was hypothesized that all of the exogenous variables would be correlated with each other. Results showed that all of the exogenous variables were correlated with each other as hypothesized (see Table 3.2). This is in line with previous research findings and is not surprising since parenting styles carry some similar features, yet remain distinct parenting styles (i.e. authoritarian and authoritative parents are both high on demands, but differ in regards to responsiveness and warmth) (Weiss & Schwarz, 1996). Additionally, the first hypothesis that parenting styles and quality of parent-child relationship would be correlated was supported. Authoritarian parenting style was negatively correlated with quality of parent-child
relationship \( r = -.38, p < .01 \), and authoritative parenting style was positively correlated with quality of parent-child relationship \( r = .64, p < .01 \). This finding is also congruent with previous studies (Niemiec et al., 2006; Ryan & Deci, 2001; Schonpflug, 2001; Nelson, Padilla-Walker, Christensen, et al., 2011).

The second hypothesis was also supported since parenting styles were correlated with the degree to which values were intrinsic or extrinsic (i.e., freely chosen). More specifically, as the Authoritarian subscale increased, the scores on the Value Purity score decreased \( r = -.59 \), and as scores on the Authoritative subscale increased, the Value Purity score increased \( r = .47 \). This finding further supports the idea that parenting styles impact how values are transmitted (Day et al., 1992; Grusec, Goodnow, & Kuczynski, 2000; Pinquart & Silbereisen, 2004, Schwartz, 2010). Thus it appears parenting styles do have an impact on value transmission.

The third hypothesis which stated that the quality of the parent-child relationship would be positively correlated with the degree that values are freely chosen was also supported (i.e., as the score on the Emotional Support subscale increased, the Value Purity score increased \( r = .54 \)). This finding also lends further support of Grusec, Goodnow, and Kuczynski’s (2000) findings that warmth, consistency, and responsiveness are key elements in a positive parent-child relationship and are conducive to the transmission of values.

Finally, it was predicted that parenting types would directly affect both quality of parent-child relationship and valuing. As discussed below, this hypothesis was also supported. In order to test whether parenting types would directly affect both quality of parent-child relationship and valuing, two regressions were performed. The first regression analysis for this model showed parenting styles (i.e., Authoritarian subscale \( \beta = -.17 B = -.03, p < .001 \)) and \( \beta = .57, B = .11, p < .001 \) significantly predicted the closeness of the parent-child relationship (as measured
by the Emotional Support Score on the Quality of Relationships Inventory). The results of the second regression analysis for this model indicated that parenting styles (i.e., Authoritarian subscale ($\beta = -.43, B = -1.70, p < .001$) and Authoritative subscale ($\beta = .12, B = .53, p < .001$), and the closeness of the parent-child relationship (as measured by the Emotional Support Score on the Quality of Relationships Inventory ($\beta = .30, B = 6.80, p < .001$) significantly predicted the degree to which values are intrinsically chosen. Thus, parenting styles and closeness of the parent-child relationship have direct effects on the degree to which values are intrinsically or extrinsically chosen (see Figure 3.2).

These findings support the concept that parents impact value transmission through parenting style (Grusec, Goodnow, and Kuczynski, 2000) and lend support to the idea that parenting styles impact value development. The results indicate authoritative parents tend to have children who have more freely chosen or intrinsic values. This is likely because these children tend to possess higher levels of autonomy than children of authoritarian and permissive parents (Deslandes, 2000). Furthermore, authoritative parents appear to be able to balance their conformity demands with their respect for their children’s individuality (Baumrind, 1973). Authoritative parents tend to focus less on having their children strictly adhere to the parents’ rules or ideas and are treat their children with more respect and openness than authoritarian parents do (Baumrind, 1973). As a result, children from authoritative homes appear to be able to better balance the claims of external conformity and achievement demands with their need for individuation and autonomy (Baumrind, 1973). Because children’s individuality and autonomy are respected and fostered in authoritative homes, these children are likely more comfortable and able to evaluate values for themselves. Thus, these children are more likely to intrinsically
choose values that are important to them and not out of adherence to their parents’ or societies ideas or pressures.

These findings also suggest the quality of the parent-child relationship are important in the degree to which values are freely chosen (i.e., intrinsic vs. extrinsic). Because authoritative parents tend to place high value on verbal give-and-take and use reasoning and consistency in interactions with their children, it is not surprising that the results showed this parenting style is associated with a closer parent-child relationship (Baumrind, 1978). If parents spend time explaining to their children why certain rules or expectations exist and discussing the consequences for failing to adhere to those rules and expectations then the parent-child relationship is likely to be closer (Grusec, Goodnow, and Kuczynski, 2000). Moreover, this parenting style is associated with better communication between the parent and child (Baumrind, 1973). It is likely that open communication and a good parent-child relationship fosters autonomy and provides an individual the milieu to consider whether something is important to them and to more freely choose their values. Research indicates warmth, consistency, and responsiveness are key elements within the authoritative parenting style that help with value transmission (Grusec, Goodnow, and Kuczynski, 2000). Moreover relatedness or closeness is also an imperative key to the process of internalizing values from one’s environment (Niemiec et al., 2006; Ryan & Deci, 2000). Therefore, if an individual comes from an environment with warmth, consistency, and responsiveness, they are more likely to truly consider whether a value is important to them or if it is important because of external factors. Thus, they are more able to freely choose their own values.

Conversely, since parents utilizing an authoritarian parenting style use power assertion to guide their children and tend to leave no room for questioning or discussion it is not surprising
that this parenting style was associated with a more distant parent-child relationship. Furthermore, compared to authoritative parents, authoritarian parents tend to use force, punitive measures, and are less likely to use rational methods of control in order to curb their children’s self-will (Baumrind, 1973). There is also some evidence suggesting authoritarian parents attempt to control their children’s behavior through the use of guilt induction, withdrawal of love, or shaming (McCord, 1996). These techniques tend to bring about high levels of obedience, but lead to levels of self-concept, expressiveness, and independence in children (Lamborn, et al., 1991; Hill, 1995; Shumow et al., 1998). Because children from authoritarian homes tend to have lower levels of self-concept, expressiveness, and autonomy they are likely less likely to evaluate whether the value something because it is a true intrinsic value rather than an extrinsically based value.

Moreover, authoritarian parents are likely to have less close relationships with their children since they tend to foster an environment where one does not feel they can openly communicate. Because authoritarian parents tend to expect their children to rigidly adhere to their expectations and demands, there is no room for the child to discuss things with their parents. This lack of warmth, responsiveness, and openness often creates distance between the parent and child (Schonpflug, 2001). Since children of authoritarian parents lack a milieu that fosters open communication and closeness in the parent-child relationship, it is likely these children do not evaluate whether a value is their own intrinsic value or an extrinsic value because this exploration and questioning would likely not be allowed at the home.

Freely chosen values have been found to be associated with better psychological health (Chapman, Gratz, & Brown, 2006; Hayes et al., 1996; Hayes et al., 1998). More specifically, pliance, rule-governed behavior where one does something in efforts to gain social-verbal favor,
has been associated with negative psychological outcomes (Hayes et al., 2001; Hayes, Zettle & Rosenfard, 1989; Törneke, Luciano, Valdivia Salas, 2008; Zettle & Hayes, 1982). Pliance can be applied to valuing behavior. For instance if a child values education only to please their parents, the valuing behavior is a ply. Tracking is another form of rule-governed behavior (Törneke, Luciano, Valdivia Salas, 2008). Another form of rule-governed behavior is augmenting (Törneke, Luciano, Valdivia Salas, 2008). Augmenting refers to changing the reinforcing value of the consequences specified in the rule school (Törneke, Luciano, Valdivia Salas, 2008). Augmenting can be explained through RFT; a valued behavior is associated with a consequence, thereby changing the power of that consequence. Augmenting makes it possible for behaviors to be shaped indirectly, through distal consequences that may be only cognitive or verbal in nature. For example, if a child follows the rule “Make good grades and you’ll be successful in life,” in order to be successful in life then he is augmenting (Törneke, Luciano, Valdivia Salas, 2008). Typically, values associated with this process are seen as intrinsic. However, augmenting has been associated with psychopathology (Barnes-Holmes, et al., 2001; Luciano et al., 2004) in some situations, for some people.

3.6.2 Results with Male Caregivers

In the path analysis model for male caregivers, parenting style (Authoritarian and Authoritative subscales) are the exogenous variables and the quality of the parent-child relationship and value purity are the endogenous variables. It was hypothesized that all of the exogenous variables would be correlated with each other. Results show that all of the exogenous variables are correlated with each other (see Table 3.3). Again, this finding lends further support to previous research findings and is not surprising since parenting styles carry some similar
features, yet remain distinct parenting styles (i.e. authoritarian and authoritative parents are both high on demands, but differ in regards to responsiveness and warmth) (Weiss & Schwarz, 1996). Additionally, this finding is similar to findings from this current study with the female caregivers.

The first hypothesis that parenting styles and quality of parent-child relationship would be correlated was supported. Authoritarian parenting style was negatively correlated with quality of parent-child relationship. Authoritative parenting style was positively correlated with quality of parent-child relationship. These findings are not surprising since the authoritative parenting style is marked by warmth, responsiveness, and communication (Baumrind, 1973), which may lead to a close parent-child relationship (Niemiec et al., 2006; Ryan & Deci, 2001; Schonpflug, 2001). Moreover, these findings are consistent with previous research (Niemiec et al., 2006; Ryan & Deci, 2001; Schonpflug, 2001) and the finding from the current study with the female caregivers. Nelson, Padilla-Walker, Christensen, et al. (2011) found authoritative mothers and fathers had more positive parent-child relationships than did authoritarian mothers and fathers. The second hypothesis was not supported. Neither the authoritarian nor authoritative parenting styles were significantly correlated with the degree to which values are freely chosen (i.e., intrinsic vs. extrinsic). However, while these correlations were not significant the relationships were in the hypothesized directions. For example, there was a negative relationship trend between the authoritarian parenting style and the closeness of the parent-child relationship, despite its non-significance. There was a positive relationship trend between the authoritative parenting style and the closeness of the parent-child relationship despite its non-significance. It seems, therefore, that there might have just not been enough participants reporting on male caregivers to power this analysis. The third hypothesis that the quality of parent-child relationship would be positively correlated with degree the degree values are freely chosen was
also not supported. However, there was a positive relationship trend between the quality of parent-child relationship and the degree values are freely chosen, despite non-significance of this relationship. Again, sample size may have interfered with finding an effect.

Finally, it was predicted that parenting types would directly affect both quality of parent-child relationship and valuing. As discussed below, this hypothesis was also partially supported. The first regression analysis for this model showed parenting styles (i.e., authoritarian and authoritative) did not significantly predict the closeness of the parent-child relationship (as measured by the Emotional Support Score on the Quality of Relationships Inventory). The Authoritarian subscale did not significantly predict the relationship with the closeness of the parent-child relationship. On the other hand, the authoritative parenting style did significantly predict a positive relationship with the closeness of the parent-child relationship. The non-significant finding between the authoritarian parenting style and the relationship with the closeness of the parent-child relationship is inconsistent with previous research (Niemiec et al., 2006; Ryan & Deci, 2001; Schonpflug, 2001; Nelson, Padilla-Walker, Christensen, et al., 2011). In the current study, more male caregivers were ranked higher in the authoritative parenting style than the authoritarian parenting style. Therefore, it is possible more authoritarian male caregivers were needed to predict the relationship between this parenting style and the closeness of the parent-child relationship. The results of the second regression analysis for this model indicated that parenting styles (i.e., authoritarian and authoritative) and the closeness of the parent-child relationship (as measured by the Emotional Support Score on the Quality of Relationships Inventory) do not significantly predict the degree to which values are intrinsically chosen. These findings were not expected based on previous research. Results of the current study with regard to male caregivers do not support the idea that parents impact value
transmission through parenting style (Grusec, Goodnow, and Kuczynski, 2000). Furthermore, results with the male caregivers does not lend support to the idea that parenting styles impact value development. Additionally, these findings are inconsistent with previous research, which indicates the quality of the parent-child relationship is important in value transmission (Grusec, Goodnow, and Kuczynski, 2000; Niemiec et al., 2006; Ryan & Deci, 2000). The authoritarian parenting style does not seemingly have a direct effect on the closeness of the parent-child relationship, and it did not have a direct or indirect effect on the degree to which values are intrinsically or extrinsically chosen in this sample. The authoritative parenting style had a direct effect on the closeness of the parent-child relationship, but it did not have a direct or indirect effect on the degree to which values are intrinsically or extrinsically chosen. Finally, the closeness of the parent-child relationship did not have a direct effect on the degree to which values are intrinsically or extrinsically chosen (see Figure 3.3).

Although only one of the hypotheses was fully supported when looking at male caregivers, this could be due to several factors. First, there were fewer primary male caregivers than primary female caregivers; thus, due to a lack of participants identifying as having a primary male caregiver the sample was too small and underposed. Second, the involvement of the male and female caregivers in raising the child was not assessed; therefore, while an individual may have had a male and a female caregiver, the level of involvement in raising the child may have impacted the findings. For example, if an individual was raised by both their mother and father but the father was frequently at work his parenting style and parent-child relationship may have less of an impact than that of the female caregiver.
3.7 Limitations

Several limitations should be noted when interpreting the results of this current study. First, although path analysis is meant to be a causal model it cannot establish the direction of causality. Path analysis is a more specific form of regression analysis and is intended to examine causal processes underlying the observed relationship and to estimate the relative importance of alternative paths of influence. However since path analysis is regression based, the confirmation of a causal model does not prove that a model is in fact valid.

While choosing an undergraduate sample who was in the emerging adulthood period was theoretically important to this study, some limitations come with the research design. For instance, the cross sectional nature of this study prohibits observation of value development over time. Further, given the retrospective nature of the self-report of childhood during emerging adulthood, there is limited and biased information on the roles of parenting styles and quality of the parent-child relationship. Thus, the degree to which values are freely chosen cannot be definitively described as the result of parenting styles and the quality of the parent-child relationship. Longitudinal studies are needed to explore these relationships and how parenting styles impact value development over time. Through longitudinal studies we can see how parenting styles and the closeness of the parent-child relationship impact how values develop beginning with childhood to adulthood and how changes occur over time. Adolescents may or not begin to evaluate their values while they are living with their caregivers and have less responsibility. However, as one moves out of the home and spends more time exploring who they are and what is important to them they may begin to explore their values. As one becomes more established in the adult developmental phase they may reach a point where they no longer explore or evaluate why something is or is not important to them. Longitudinal
treatment studies with parent trainings, family therapy, and individual therapy, which focus on parenting styles, quality of parent-child relationship, and value development could also offer information about how value development occurs over time.

Additionally, the undergraduate sample consisted of predominantly females and European American undergraduates attending a university in the south-central region of the United States. Hence, results may not generalize to students who belong to an ethnic minority or students in other geographical locations. Furthermore, undergraduates who completed the study may differ from students who did not volunteer for the study. This limitation is often seen in volunteer samples since it is unclear if participants who submit for studies are psychologically healthy than individuals who do not volunteer for the study. Additionally, since compensation was research credits for undergraduate psychology classes there may be a difference between individuals who choose to take a psychology course and participate in research.

Another limitation of this study stems from the nature of measures utilized in the current study. Currently, there is not a psychometrically sound measure to assess Maccoby and Martin’s (1983) revised parenting prototypes. Studies have shown differences between permissive indulgent and permissive neglectful parents and their children’s outcomes (Maccoby & Martin, 1983). However, due to the lack of a psychometrically sound measure to assess permissive indulgent and permissive neglectful parenting styles from the child’s perspective, this study was unable to examine how these parenting styles impact the quality of the parent-child relationship and value development. The impacts of parenting styles and closeness of the parent-child relationship on value development have never been explored with emerging adults. The only studies that have examined parenting styles and value transmission
have been with children and adolescents and these participants may not be in the developmental period to truly explore their values. However, this study was unable to consider how permissive indulgent and permissive neglectful parenting styles impact the closeness of the parent-child relationship and value development. These results are needed to inform research and intervention with individuals from permissive indulgent or permissive neglectful homes.

Furthermore, another limitation lies within the method of data collection and measurement. Data was collected through an online survey, in which participants could complete the measures in an environment of their choice. Thus, the testing environment was not standardized and controlled environment. Due to this, it is possible that participants may have been subject to external distractions that could have led them to not attend to all items. Furthermore, it is possible participants may have responded to items quickly in order to complete the task. Finally, an online survey is susceptible to human error and technology error.

3.8 Future Directions

The current study is the first to explore the relationship between parenting styles, quality of parent-child relationship, and freely chosen values (i.e., intrinsic values); however, due to the limitations of this study, additional research is needed. Due to an insufficient number of participants who identified as having a primary male caregiver, more research is needed in this area. Specifically identifying how much time and what types of activities were spent with female and male caretakers, respectively also would be a benefit.

Additionally, Maccoby and Martin (1983) revised the parenting prototypes defined by Baumrind (1971). The revised model suggests that four parenting styles would be more representative of the differences in parenting styles and separated the permissive parenting style
into permissive indulgent and permissive rejecting/neglecting parenting styles. Thus, there is a need for a measure to be developed to assess Maccoby and Martin’s (1983) revised the parenting prototypes from the child’s perspective that has been normed with children, adolescents, and adults. Future research can utilize the new measure that assesses Maccoby and Martin’s (1983) revised parenting prototypes and include the permissive indulgent and permissive neglectful parenting types. This new measure could be composed of four subscales: permissive-indulgent, permissive-rejecting/neglectful, authoritarian, and authoritative. Scores would be derived for both the primary female caregiver and the primary male caregiver. Responses to each item would be chosen from a 5-point Likert-type scale ranging from strongly disagree (1) to strongly agree (5) and higher scores would reflect a higher degree of that parenting style. The permissive-indulgent subscale would ask questions related to high warmth and nurturing, low maturity demands, low control of the child's behavior, and high communication between the caregiver and child. The permissive-rejecting/neglectful subscale could ask questions related to low warmth and nurturing, high maturity demands, low control of the child's behavior, and low communication between the caregiver and child. The authoritarian subscale might include questions related to low warmth and nurturing, high maturity demands, high control of the child's behavior, and low communication between the caregiver and child. Finally, the authoritative subscale would include questions related to high warmth and nurturing, high maturity demands, high control of the child's behavior, and high communication between the caregiver and child.

3.9 Clinical Implications

Previous research suggests emerging adulthood is an important period for value development, and the findings of this study indicate that parenting style and closeness of the
parent-child relationship play an important role in value development throughout this life transition. Several studies have demonstrated high valuing is negatively correlated with various symptoms of psychopathology (Adcock, Murrell, & Woods, 2007; Plumb et al. 2007; VanDyke, Rogers, & Wilson, 2006; Taravella, 2010; McCracken & Yang, 2006). Van Dyke and Rogers (2006) found individuals who reported low valuing also reported greater distress and individuals who indicated low and moderate valuing reported greater experiential avoidance. In a study of valuing and psychological distress, Adcock, Murrell, and Woods (2007) indicated that valuing many things was highly predictive of psychological well-being. Similarly, individuals diagnosed with depression were also found to report greater inconsistency within different goals and value domains (Stanger, Ukrow, Schermelleh-Engel, Grabe, Lauterbach, 2007). Taken together, these studies suggest an inverse relationship between acceptance and valuing behavior and psychological distress. Additionally, college student mental health issues have been on the rise, especially in recent decades (Hunt & Eisenberg, 2010). Some reports indicate that the rate of depression has been steadily rising in the last few years among undergraduates, a particular concern given the high rates of suicide attempts in college-age individuals (Kisch, Leino, & Silverman, 2005). These findings indicate it is imperative for research to be conducted examining values in an emerging adulthood sample, to gain better understanding and aid in treatment and intervention.

Approaches to therapy that explicitly address values may be beneficial to emerging adults. In the ACT model, values are choices that are to be made freely, and are not chosen based on the influence of others, or in the avoidance of some negative experience. Thus, individuals are urged to choose what they want their lives to be about (Wilson & Murrell, 2004). If individuals are receiving interventions, which focus on exploring and freely choosing one’s
values they are likely to have less psychological distress. An important piece of facilitating value clarification is understanding how values are developed. Hence, understanding how values develop and conceptualizing the roles that parenting styles and the parent-child relationship play in value development can prove beneficial to treatment outcomes.

3.10 Conclusion

The current study lends support to the importance of parenting styles and the parent-child relationship in value development. When female caregivers were included in a model of youth values development, it was clear that parenting styles and closeness of the parent-child relationship have direct effects on the degree to which values are intrinsically or extrinsically chosen. However, this pathway is less strong and direct for male caregivers. With only male caregivers in the model, authoritative parenting style had a direct effect on the closeness of the parent-child relationship, but it did not have a direct or indirect effect on the degree to which youth’s values are intrinsically or extrinsically chosen. The authoritarian parenting style did not have a direct effect on the closeness of the parent-child relationship and it did not have a direct or indirect effect on the degree to which youth’s values are intrinsically or extrinsically chosen. Also, the closeness of the parent-child relationship did not have a direct effect on the degree to which values are intrinsically or extrinsically chosen.

This study’s findings may help improve client conceptualizations and client outcomes with undergraduates and parent and family interventions. Significant findings in the female caregiver path analysis provide important information for parent trainings and treatment of individuals. Because freely chosen or intrinsic values have been associated with better psychological outcomes, it is important to understand how values are developed in order to
provide the most effective interventions. Additionally, interventions, like ACT, that place explicit importance on values, may be uniquely situated to help improve parenting skills, parent-child relationships, and freely choosing one’s values.
APPENDIX A

INFORMED CONSENT
University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: An Exploration of Parenting Styles Impact on the Development of Values

Principal Investigator: Amy R. Murrell, Ph.D., University of North Texas (UNT) Department of Psychology.

Purpose of the Study: You are being asked to participate in a research study looking at how different parenting styles impact value development in college students.

Study Procedures: If you decide to volunteer, you will complete a series of electronic questionnaires about yourself, your parents or primary caregivers, your relationship with your parents or primary caregivers, your values, anxiety, depression, stress, and self-compassion. The total time for this study is approximately 2 hours.

Foreseeable Risks: Answering questions about yourself, your parents or primary caregivers, your relationship with your parents or primary caregivers, your values, anxiety, depression, stress, and self-compassion may be distressing. We do not expect the level of distress you might feel to be any greater than you would feel in your daily life. If you do become emotionally distressed, you may stop doing the study. There will be no negative consequences for withdrawal.

Benefits to the Subjects or Others: There will not be any direct benefits of this research to you, other than the experience of being involved in a study. There is a potential benefit to our understanding of how different parenting styles impact value development in college students and information from this study may be used to in interventions.

Compensation for Participants: If you are enrolled in an undergraduate psychology course at UNT you will receive four research credits for participation in this study. Students may also choose to write research summaries to earn research credits in lieu of participating in studies. Your decision to participate or to withdraw from the study will have no effect on your standing in this course or your course grade.

Procedures for Maintaining Confidentiality of Research Records: Your name will not be attached to any materials used. You will be assigned a participant number at the beginning of the experiment. All of your materials will be attached to your participant number and not your name. Your date will be kept on a password protected computer that is in a locked room in Dr. Amy Murrell’s lab in Terrill Hall. Your name will not be used in any research reports or publications that result from this study, nor will your participation be disclosed to any unauthorized persons.
Questions about the Study: If you have any questions about the study, you may contact the Contextual Psychology Lab at (940) 369-8826, or Kristi Mannon at KristiMannon@my.unt.edu or Dr. Amy Murrell at amurrell@unt.edu. Dr. Amy Murrell is a faculty member of the UNT Psychology Department and the sponsor for this project.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants’ Rights:

Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.

If you agree to participate, you may print this document for your records.

By clicking below, you are confirming that you are at between the ages of 18 and 25 years old and you are giving your informed consent to participate in this study.

☐ I Agree
APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE
Demographics Questionnaire

Please answer some questions about yourself:

1. What is your age in years? ___________________

2. What is your birth date? ___________________

3. What is your marital status?
   - □ Single
   - □ Married
   - □ Separated
   - □ Divorced
   - □ Widowed
   - □ Other _______________

4. What is the highest level of education or grade you completed?
   - □ Undergraduate Freshman
   - □ Undergraduate Sophomore
   - □ Undergraduate Junior
   - □ Undergraduate Senior
   - □ Graduate school

5. What is your current income range per year?
   - □ 0 – 20,000
   - □ 20,001 – 40,000
   - □ 40,001 – 60,000
   - □ 60,001 – 80,000
   - □ 80,001 – 100,000
   - □ 100,001 and above

6. Are you currently employed?
   - □ Yes, part time
   - □ Yes, full time
   - □ No

7. What is your ethnicity?
   - □ African American (Black)
   - □ Asian/Pacific Islander
   - □ Caucasian (White)
   - □ Hispanic (Latino, Latina, Mexican)
   - □ Middle Eastern/Arab
   - □ Native American (Indian)
   - □ Biracial, please specify ______________________________
   - □ None of these, I am: ______________________________

8. What is your gender?
   - □ Male
   - □ Female
   - □ None of these, I am: ______________________________

8. Who raised you?
   - □ Father and mother
   - □ Step-father and mother
   - □ Father and Step-mother
   - □ Grandfather and Grandmother
   - □ Other, please specify: ______________________________
REFERENCES


revised measure of psychological flexibility and acceptance. Manuscript submitted for publication.


Kisch J, Leino EV, Silverman MM. Aspects of suicidal behavior, depression, and treatment in


determination of sample size for covariance structure modeling. *Psychological
Methods, 1*, 130-149.

interaction. In P.H. Mossen (Series Ed.) & E.M. Hetherington (Vol Ed.), Handbook of
child psychology: Vol. 4, socialization, personality, and social Development (4th ed., P.1-

unfavorable environments: Lessons from research on successful children. *American
Psychologist, 53*, 205-220.

properties for social drinkers and drinkers in alcohol treatment. *Educational and
Psychological Measurement, 63*, 859-871.

*New Directions in Child and Adolescent Development. 100*, 5-20.

McCracken, L. M. & Yang, S. (2006). The role of values in a contextual cognitive-behavioral


Meyer, D. (2004). *Exploring secure attachment and parenting style as they relate to
intimacy, well-being, social problem-solving and ego-identity*, (M.A), Humboldt
State University.


Plumb, J., Hayes, S., Hildebrandt, M., & Martin, L. (2007). *Values and valued action as key processes in treating depression*. Presentation at the annual meeting of the


VanDyke, J., Rogers, L., & Wilson, K., (2006). *Valued living, experiential avoidance, and psychological well-being*. Presentation at the annual meeting of the Association for Behavior Analysis, Atlanta, GA.


M. (Eds.), *Mindfulness & Acceptance: Expanding the cognitive-behavioral tradition* (pp. 120-151). New York: Guilford Press.