A Correlational Study on Parental Attachment and Moral Judgment Competence of Millennial Generation College Students

Deidra Graves Stephens

University of Nebraska at Lincoln, deidra.stephens@mccombs.utexas.edu

Follow this and additional works at: http://digitalcommons.unl.edu/cehsdiss

Part of the Educational Psychology Commons, Higher Education Administration Commons, and the Student Counseling and Personnel Services Commons


http://digitalcommons.unl.edu/cehsdiss/32

This Article is brought to you for free and open access by the Education and Human Sciences, College of (CEHS) at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Public Access Theses and Dissertations from the College of Education and Human Sciences by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
A CORRELATIONAL STUDY ON PARENTAL ATTACHMENT
AND MORAL JUDGMENT COMPETENCE
OF MILLENNIAL GENERATION COLLEGE STUDENTS

by

Deidra Graves Stephens

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
In Partial Fulfillment of Requirements
Of the Degree of Doctor of Philosophy

Major: Educational Studies
(Educational Leadership & Higher Education)

Under the Supervision of Professor Ronald Joekel

Lincoln, Nebraska
May, 2009
A CORRELATIONAL STUDY ON PARENTAL ATTACHMENT 
AND MORAL JUDGMENT COMPETENCE 
OF MILLENNIAL GENERATION COLLEGE STUDENTS 

Deidra Graves Stephens, Ph.D. 
University of Nebraska, 2009

Adviser: Ronald Joekel

Theorists and observers have speculated that Millennial Generation college students may progress through cognitive-structural models differently than previous generations. These models, such as Lawrence Kohlberg’s theory of moral development, require individuals to shift from accepting authoritarian views to making their own meaning of the world. Millennials are deferential to the role of parents in their lives, accepting authority, convention, and structure, and acquiescing to rules, order, and expectations. On the other hand, some have predicted that Millennials’ unique view of the world and their place within it may generate more advanced levels of cognitive development than previous generations.

This quantitative study was conducted to determine if there was a correlation between parental attachment and the moral judgment competence of college students in the context of their Millennial generation characteristics.

The population studied included 6,091 students enrolled in two campuses of a major university system in the northeastern United States. Responses were received from 1,272 students (20.88% response rate). Subjects’ level of perceived parental attachment was measured using the Parental Attachment Questionnaire (PAQ) and subjects’
percentage of demonstrated moral judgment competence was measured using the Moral Judgment Test (MJT). Other variables studied included gender, ethnicity, class standing, and age. Overall, no significant relationship was found between perceived parental attachment and moral judgment competence in the population, although the research did find significant differences by demographic characteristics. The correlation between moral judgment competency and parental fostering of autonomy was significant for non-Caucasians, sophomore students, and students aged 18-19. The correlation between moral judgment competency and total parental attachment, as well as between moral judgment competency and affective quality of attachment was also significant for sophomore students.

Results provided a quantitative illustration of the influence of parental attachment and demographic characteristics on moral judgment competence. This illustration offers theorists guidance on theory revision, gives higher education administrators direction on developing programs and services for students and parents to assist students in their moral development, and provides a foundation for future research.
ACKNOWLEDGEMENTS

When I began the doctoral program in higher education administration in September 2001, I set five major life goals: (a) marry, (b) have a child, (c) buy a home, (d) complete a Ph.D. program, and (e) travel extensively. In the past eight years, I have accomplished all of these goals. I married Brian in May of 2005, and we purchased our first home together the same month. Avery was born in November 2006. Meanwhile, I have traveled to five continents and seen a variety of cultures and wonders. Now, finally, I am achieving the final goals: completing the Ph.D. program. I never dreamed this would be the most arduous of my goals and how tenacious I would have to be to accomplish it.

I have so many people to thank for their support and encouragement through this process. First, thanks to my wonderful advisor, Dr. Ron Joekel, for his continuous support. He never failed to be the voice of reason in the insanity of balancing a new family, new jobs, and never-ending demands on my time. Dr. Joekel understood that the process was as valuable as the end goal. Thank you for not giving up on me! I would also like to acknowledge Dr. Richard Hoover, Dr. Joe McNulty, Dr. Alan Seagren, Dr. Donald Uerling, and Dr. McLaren Sawyer for their continued faith in me.

I owe a debt of gratitude to the faculty, staff, and students at the two higher education institutions I have worked for during the course of this program, Texas A&M University-Corpus Christi and University of Texas at Austin. Thanks to all of those who encouraged me and picked up the slack as I pursued this goal.

I was inspired by Amanda Chesser Drum and Theresa Sharpe, my two best friends who completed this journey before me. Thank you for your guidance and
willingness to hear all of my complaints and successes. I am so blessed to have such wonderful friends!

Special thanks to my mother, Sharon Kurklin, and my father, Walter Graves, for their constant faith in my abilities. From the very beginning they nurtured my talents and gave me a strong desire to learn. I also acknowledge all of my other family members who would continually ask about my progress and never doubted that I would accomplish this goal.

No acknowledgement would be complete without mentioning my Nebraska classmates Natalie Lupton and Mary-Ellen Madigan. I would not be writing these words today without you. Very few doctoral students who complete their studies at a distance create relationships like we have, and I venture to guess none communicate almost daily like we do. Your constant presence in my life and encouragement are the reason why I finished this program. We made a vow that none of us would quit this program, and it was that promise that kept me going when I was least motivated. Special thanks to Mary-Ellen for teaming up with me on our research when we both needed that extra push. I could not and would not have done this without you.

Finally, I appreciate my husband Brian for his willingness to sacrifice family time and resources. He is a great source of strength to me, and he never doubted that I could and would finish the program, but he never pressured me to do so. Avery is two years old, so she is blissfully unaware of the sacrifices she has made to make me Dr. Mommy. But I thank her for giving me a reason to stay ABD for a little longer, but also for giving me a reason to continue. Hopefully this accomplishment will give her the message that education, in and of itself, is more important than what you eventually do with it.
Travel and education are mind broadening, and the more I learn from these activities, the more I appreciate the simple things in life. Simple things such as laughing with Avery, chatting about my day with Brian, interacting with friends and co-workers, and corresponding with Natalie and Mary-Ellen on our blog. I look forward to having more time for the simple things and enjoying time with people who mean so much.
Table of Contents

Chapter 1—Introduction ......................................................... 1
   Context of Problem ......................................................... 3
   Purpose Statement ......................................................... 4
   Research Considerations ............................................... 4
   Theoretical Base ............................................................ 5
      Attachment Theory ...................................................... 5
      Moral Development Theory ........................................... 5
   Research Questions & Hypotheses ................................. 6
   Definitions ................................................................. 10
   Delimitations ............................................................... 12
   Limitations ................................................................. 13
   Significance of Study ..................................................... 13

Chapter 2—Literature Review .................................................. 16
   Millennial Generation & Helicopter Parents ..................... 16
      Generational Differences .......................................... 16
         Lost Generation ..................................................... 17
         G.I. Generation ...................................................... 17
         Silent Generation .................................................. 17
         Boom Generation .................................................. 18
         Generation X ......................................................... 18
         Millennial Generation ............................................. 18
   Demographics of Millennials ......................................... 19
   Core Traits ............................................................... 21
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special</td>
<td>21</td>
</tr>
<tr>
<td>Sheltered</td>
<td>21</td>
</tr>
<tr>
<td>Confident</td>
<td>22</td>
</tr>
<tr>
<td>Team-Oriented</td>
<td>22</td>
</tr>
<tr>
<td>Conventional</td>
<td>23</td>
</tr>
<tr>
<td>Pressured</td>
<td>24</td>
</tr>
<tr>
<td>Achieving</td>
<td>24</td>
</tr>
<tr>
<td>Millennials and Student Development</td>
<td>24</td>
</tr>
<tr>
<td>Parents of Millennials</td>
<td>26</td>
</tr>
<tr>
<td>Boom Generation Parents</td>
<td>26</td>
</tr>
<tr>
<td>Generation X Parents</td>
<td>28</td>
</tr>
<tr>
<td>Helicopter Parents</td>
<td>28</td>
</tr>
<tr>
<td>Implications for Higher Education</td>
<td>32</td>
</tr>
<tr>
<td>Summary</td>
<td>35</td>
</tr>
<tr>
<td>Attachment Theory</td>
<td>35</td>
</tr>
<tr>
<td>Precursors to Attachment Theory</td>
<td>35</td>
</tr>
<tr>
<td>Bowlby’s Theory of Attachment</td>
<td>36</td>
</tr>
<tr>
<td>Ainsworth’s Strange Situation Experience</td>
<td>38</td>
</tr>
<tr>
<td>Basic Patterns of Attachment</td>
<td>39</td>
</tr>
<tr>
<td>Secure</td>
<td>39</td>
</tr>
<tr>
<td>Anxious-Avoidant</td>
<td>40</td>
</tr>
<tr>
<td>Anxious-Resistant</td>
<td>41</td>
</tr>
<tr>
<td>Disorganized-Disoriented</td>
<td>42</td>
</tr>
<tr>
<td>Working Models</td>
<td>42</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>--------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Attachment Throughout the Lifespan</td>
<td>43</td>
</tr>
<tr>
<td>Adolescent &amp; College Student Attachment</td>
<td>44</td>
</tr>
<tr>
<td>IPPA Studies</td>
<td>47</td>
</tr>
<tr>
<td>PAQ Studies</td>
<td>49</td>
</tr>
<tr>
<td>Attachment and Diversity</td>
<td>50</td>
</tr>
<tr>
<td>Gender &amp; Class Standing</td>
<td>50</td>
</tr>
<tr>
<td>Race &amp; Ethnicity</td>
<td>51</td>
</tr>
<tr>
<td>Adults and Attachment</td>
<td>52</td>
</tr>
<tr>
<td>Summary</td>
<td>53</td>
</tr>
<tr>
<td>Moral Development Theory</td>
<td>54</td>
</tr>
<tr>
<td>Jean Piaget: Cognitive Development Theory</td>
<td>55</td>
</tr>
<tr>
<td>Lawrence Kohlberg: Moral Reasoning &amp; Development Theory</td>
<td>56</td>
</tr>
<tr>
<td>Carol Gilligan: Moral Development in Males &amp; Females</td>
<td>61</td>
</tr>
<tr>
<td>The Neo-Kohlbergians: Moral Reasoning Theory</td>
<td>63</td>
</tr>
<tr>
<td>Georg Lind: Dual-Aspect Theory of Moral Behavior &amp; Development</td>
<td>64</td>
</tr>
<tr>
<td>Robert Kegan: Social Maturity Theory</td>
<td>66</td>
</tr>
<tr>
<td>Moral Development and College Students</td>
<td>67</td>
</tr>
<tr>
<td>Moral Development &amp; Diversity</td>
<td>68</td>
</tr>
<tr>
<td>Race &amp; Ethnicity</td>
<td>68</td>
</tr>
<tr>
<td>Gender</td>
<td>68</td>
</tr>
<tr>
<td>Moral Development in Millennials</td>
<td>68</td>
</tr>
<tr>
<td>Summary</td>
<td>70</td>
</tr>
<tr>
<td>Parental Attachment &amp; Moral Development</td>
<td>70</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>130</td>
</tr>
<tr>
<td>Limitations</td>
<td>131</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>132</td>
</tr>
<tr>
<td>Discussion of Findings</td>
<td>133</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>133</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>134</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>136</td>
</tr>
<tr>
<td>Research Question 4</td>
<td>139</td>
</tr>
<tr>
<td>Conclusions</td>
<td>142</td>
</tr>
<tr>
<td>Recommendations for Future Practice</td>
<td>143</td>
</tr>
<tr>
<td>Recommendation for Future Research</td>
<td>144</td>
</tr>
<tr>
<td>References</td>
<td>147</td>
</tr>
<tr>
<td>Appendices</td>
<td>170</td>
</tr>
</tbody>
</table>
List of Tables

Table 1  Demographic Characteristics of Population ............................................ 81
Table 2  Demographic Characteristics of Surveyed Campuses ............................. 81
Table 3  Demographic Characteristics of Respondents ......................................... 98
Table 4  ANOVA for PAQ Scales and MJT Scores by Response Wave ............... 100
Table 5  ANOVA for Demographics by Response Wave ..................................... 101
Table 6  Response Rates for Females and Males by Response Wave ................... 102
Table 7  Response Rates for Caucasians and Non-Caucasians by Response Wave ........................................................................................ 102
Table 8  Descriptive Statistics for PAQ Scales ...................................................... 103
Table 9  Descriptive Statistics for MJT Scores ...................................................... 104
Table 10 Correlations between PAQ Scales and MJT Scores .............................. 105
Table 11 Descriptive Statistics and t-tests for MJT Scores by Gender ................. 106
Table 12 Descriptive Statistics and t-tests for MJT Scores by Ethnicity .............. 107
Table 13 Descriptive Statistics for the MJT Scores by Class Standing ................. 107
Table 14 ANOVA for MJT Scores and Class Standing ........................................ 108
Table 15 Descriptive Statistics for the MJT Scores by Age Group ........................ 108
Table 16 ANOVA for MJT Scores and Age Group................................................ 109
Table 17 Descriptive Statistics and t-tests for the PAQ Scales by Gender .......... 110
Table 18 Descriptive Statistics and t-tests for the PAQ Scales by Ethnicity ........ 111
Table 19 Descriptive Statistics for PAQ Scales by Class Standing ........................ 113
Table 20 ANOVA for PAQ Scales and Class Standing ........................................ 114
Table 21 Descriptive Statistics for PAQ Scales by Age Group .............................. 115
Table 22 ANOVA for PAQ Scales and Age Group................................................ 116
Table 23 Correlations between the PAQ Scales and MJT Scores by Gender ................................................................. 119
Table 24 Correlations between PAQ Scales and MJT Scores by Ethnicity .......... 120
Table 25 Correlations between PAQ Scales and MJT Scores by Class Standing ....................................................................................................................... 121
Table 26 Correlations between PAQ and MJT Scores by Age Group ............... 123
Table 27 Tukey HSD Post-Hoc Procedure for Gender Wave Analysis ............... 199
Table 28 Tukey HSD Post-Hoc Procedure for Ethnicity Wave Analysis .......... 202
Table 29 Tukey HSD Post-Hoc Procedure for Parental Fostering of Autonomy by Class Year ........................................................................................................... 204
Table 30 Tukey HSD Post-Hoc Procedure for Parental Fostering of Autonomy by Age Group ........................................................................................................... 206
Table 31 Tukey HSD Post-Hoc Procedure for Parental Role in Providing Emotional Support by Age Group ............................................................................. 208
List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Differences in Moral Development in Males and Females</td>
<td>62</td>
</tr>
<tr>
<td>Figure 2</td>
<td>PAQ Scores for Females and Males</td>
<td>138</td>
</tr>
<tr>
<td>Figure 3</td>
<td>PAQ Scores for Caucasians and non-Caucasians</td>
<td>139</td>
</tr>
<tr>
<td>Figure 4</td>
<td>PAQ Scores for Students by Class Standing</td>
<td>140</td>
</tr>
<tr>
<td>Figure 5</td>
<td>PAQ Scores for Students by Age Group</td>
<td>141</td>
</tr>
</tbody>
</table>
# List of Appendices

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Pre-survey E-mail</td>
<td>170</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Survey E-mail</td>
<td>172</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Survey Instrument</td>
<td>175</td>
</tr>
<tr>
<td>Appendix D</td>
<td>First Follow-up E-mail</td>
<td>188</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Second Follow-up E-mail</td>
<td>190</td>
</tr>
<tr>
<td>Appendix F</td>
<td>Final Follow-up E-mail</td>
<td>192</td>
</tr>
<tr>
<td>Appendix G</td>
<td>Permission to Use the PAQ</td>
<td>194</td>
</tr>
<tr>
<td>Appendix H</td>
<td>Permission to Use the SEI-R</td>
<td>196</td>
</tr>
<tr>
<td>Appendix I</td>
<td>Permission to Use the MJT</td>
<td>198</td>
</tr>
<tr>
<td>Appendix J</td>
<td>Tukey HSD Post-Hoc Procedure for Gender Wave Analysis</td>
<td>200</td>
</tr>
<tr>
<td>Appendix K</td>
<td>Tukey HSD Post-Hoc Procedure for Ethnicity Wave Analysis</td>
<td>202</td>
</tr>
<tr>
<td>Appendix L</td>
<td>Tukey HSD Post-Hoc Procedure for Parental Fostering of Autonomy by Class Year</td>
<td>204</td>
</tr>
<tr>
<td>Appendix M</td>
<td>Tukey HSD Post-Hoc Procedure for Parental Fostering of Autonomy by Age Group</td>
<td>206</td>
</tr>
<tr>
<td>Appendix N</td>
<td>Tukey HSD Post-Hoc Procedure for Parental Role in Providing Emotional Support by Age Group</td>
<td>208</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

The role of parents in the life of college students is perplexing. The popular image of college students is that they begin college and disappear from parents’ lives aside from an obligatory weekly phone call and a quick visit at Thanksgiving, dirty laundry in hand. For some students, however, the umbilical cord seems to stretch all the way through the college experience and beyond. Higher education administrators often have to play a delicate balancing act between respecting and protecting students’ rights to privacy and providing the reassurance to parents that their children are getting the education and services they desire (DeBard, 2004).

Parental concern is not a new phenomenon, but in the new millennium, parents have shown increasing levels of involvement in their children’s collegiate life. Observers have speculated this is based partly on the tenacious parenting style of the baby boomer generation (Levin Coburn, 2006). These parents have taken extremely active roles in the lives of their children from the very beginning. From playing organized sports at age 3 to being part of every high school club at 17, college students have been shuttled to activities and encouraged by their parents to excel their entire lives. In addition, the explosion of technology has enabled closer communication between college students and their parents. A survey has indicated that 74% of parents communicate with their college student two or three times per week, and 33% are in contact daily. Most keep in touch via cell phone, and more than half also use e-mail to keep in contact (Rainey, 2006). In other opinion polls, an overwhelming majority of students have indicated closer bonds with
their parents than any previous generation (Wills, 2005). These trends have caused observers to give parents the label “helicopter parents,” a term that illustrates the “hovering” tendencies they demonstrate (Levin Coburn, 2006). Parents want to be involved, and students welcome their presence.

College students are part of what is referred to as the Millennial generation, a subset of the population born between 1982 and 2002. Howe and Strauss (2000) characterize “Millennials” with dichotomous principles. They value achievement and money, but they are also community-oriented and strive for positive social change. They are more populous, prosperous, educated, and diverse than previous generations. They also suffer from elevated degrees of anxiety and stress due to high parental and societal expectations (Atkinson, 2004).

Millennials are very family-oriented, with over 90% indicating they are close to their parents (Atkinson, 2004). Even those from disadvantaged backgrounds enjoy emotional support from their parents, who sacrifice to give them some of the material possessions their children crave (Howe & Strauss, 2003). Despite the pressure of an unprecedented number of extracurricular activities to join and the unending challenge to achieve, Millennials are positive they have what it takes to excel. This is due in part to the exceptional support and protection they have received from their parents over the years. Tragedy magnified by the media has shaped their lives, which has triggered a protective response in parents and has created a more trusting generation that values societal cohesion (Jayson & Puente, 2007).
Context of Problem

Strange (2004) has speculated that Millennials might progress through the cognitive-structural models of moral development differently than previous generations. With their acceptance of authority, convention, and structure, Millennials may not advance through the stages predicted by cognitive developmental models suggested by theorists. These schemas, such as Kohlberg’s (1976) theory of moral development, require individuals to shift from accepting authoritarian views to making their own meaning of the world. Strange (2004) asks if Millennials’ development will be delayed or stunted because of their reliance on convention, or if they will show even greater development due to their other characteristics, such as acceptance of diversity and understanding of moral relativism.

Millennials are more deferential to the role of parents in their lives than any previous generation (Howe & Strauss, 2003). They have been considered “special” by their parents and have always been sheltered (DeBard, 2004). Millennials “have been made to feel vital to their parents’ sense of purpose” (DeBard, 2004, p. 35) and they respond with acquiescence to rules, order, and expectations. “Questions of personal identity present themselves in powerful ways though various opportunities and choices. Predictably, such moments include processes of individuation . . . and attachment” (Strange, 2004, p. 50). Are Millennials finding a balance between individuation and attachment? The National Survey of Student Engagement (2007) found that students who communicated with their parents on a regular basis were more likely to be engaged in the college experience, and even more so when their parent intervened in a problem. On the
other hand, these students also reported lower grades than their peers, 3.21 rather than 3.31, a small but statistically significant difference. Kevin Kruger of the National Association of Student Personnel Administrators requests more research on college students so that we can better understand their unique characteristics and the role of parents in their lives (Wong Briggs, 2007). Thus, it is important to understand more about how attachment to parents influences Millennial generation students.

**Purpose Statement**

This study was conducted to determine if there was a correlation between parental attachment and moral judgment competence of college students in the context of their Millennial generation characteristics. The outcome of this research would have relevance to the types of programs that institutions provide to students and parents to assist in the moral development of college students.

**Research Considerations**

The author collaborated with Mary-Ellen Madigan on the literature review for her study, “A Correlational Study on Parental Attachment and Spiritual Development of College Students.” Data collection was conducted simultaneously using a demographic questionnaire, Parental Attachment Questionnaire, and Moral Judgment Test. Additionally, the Spiritual Experience Index-Revised was administered but was used only in Madigan’s study. This approach permitted the research team to study a variety of issues using only one data collection period and lays the foundation for more in-depth studies on these topics in the future.
**Theoretical Base**

*Attachment Theory*

John Bowlby theorized that attachment grew from social interactions with an infant’s caregiver. As infants develop attachments with their caregivers, they also form an internal working model which will influence how they will form attachments with others in the future. Bowlby (1977) defined attachment as “the propensity of human beings to make strong affectional bonds to particular others” (p. 201). Bowlby’s theory of parental attachment served as a theoretical base for this research.

A student’s growth may be facilitated by an affirmative bond with parents. Positive interactions between parents and children are characterized as secure attachment (Young & Lichtenberg, 1996). Children who do not have positive interactions are described as having insecure attachment. Secure attachment in adolescents helps them develop autonomy. Due to their internal working models, adolescents with insecure attachments are less likely to build close, trusting and satisfactory relationships with their peers and others (Allen & Land, 1999). Those adolescents may find they cannot experience security as they turn from parents to peers for support.

*Moral Development Theory*

The cognitive-structural model of moral development also served as a theoretical framework for this study. Moral development is a process of assimilating or accommodating cognitive dissonance when faced with unfamiliar situations (Wadsworth, 1979). Specifically, Kohlberg’s theory of moral development guided this research. Moral
judgment is the foundation of Kohlberg’s theory and is thought to drive behavior (Blasi, 1980; Kohlberg, 1984; Rest, 1986).

Kohlberg theorized that moral judgment evolves sequentially through a series of stages (Kohlberg, 1976). Each stage represents the way a person relates the external world during that period of individual development. The three stages of Kohlberg’s theory are: (a) Preconventional, a state where the individual lacks awareness of or concern with the rules of society; (b) Conventional, where individuals develop an awareness and respect for societal rules; and (c) Post-Conventional, where an individual’s own value system supersedes the rules of society.

Research Questions & Hypotheses

The purpose of this study was to determine if there exists a correlation between parental attachment and moral judgment competence of Millennial generation college students. The research questions and hypotheses were:

R1: Was there a correlation between students’ perceived parental attachment and their overall percentage of demonstrated moral judgment competence?

H1a: There was no correlation between the total score on the Parental Attachment Questionnaire (PAQ) and the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT).

H1b: There was no correlation between the PAQ Affective Quality of Attachment subscale and the percentage of demonstrated moral judgment competence (C score).
H1c: There was no correlation between the PAQ Parental Fostering of Autonomy subscale and the percentage of demonstrated moral judgment competence (C score).

H1d: There was no correlation between the PAQ Parental Role in Providing Support subscale and the percentage of demonstrated moral judgment competence (C score).

R2: What was the students’ demonstrated moral judgment competence, and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

H2a: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between males and females.

H2b: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between Caucasians and non-Caucasians.

H2c: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students with different class standings.

H2d: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students in different age groups.
R3: What were the students’ overall scores and the scores on the subscales of the Parental Attachment Questionnaire (PAQ), and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

H3a: There was no difference between males and females on the total Parental Attachment Questionnaire (PAQ) score.

H3b: There was no difference between males and females on the PAQ Affective Quality of Attachment subscale.

H3c: There was no difference between males and females on the PAQ Parental Fostering of Autonomy subscale.

H3d: There was no difference between males and females on the PAQ Parental Role in Providing Emotional Support subscale.

H3e: There was no difference between Caucasians and non-Caucasians on the total Parental Attachment Questionnaire (PAQ) score.

H3f: There was no difference between Caucasians and non-Caucasians on the PAQ Affective Quality of Attachment subscale.

H3g: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Fostering of Autonomy subscale.

H3h: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Role in Providing Emotional Support subscale.

H3i: There was no difference between college students by class standing on the total Parental Attachment Questionnaire (PAQ) score.
H3j: There was no difference between college students by class standing on the PAQ Affective Quality of Attachment subscale.

H3k: There was no difference between college students by class standing on the PAQ Parental Fostering of Autonomy subscale.

H3l: There was no difference between college students by class standing on the PAQ Parental Role in Providing Emotional Support subscale.

H3m: There was no difference between college students by age group on the total Parental Attachment Questionnaire (PAQ) score.

H3n: There was no difference between college students by age group on the PAQ Affective Quality of Attachment subscale.

H3o: There was no difference between college students by age group on the PAQ Parental Fostering of Autonomy subscale.

H3p: There was no difference between college students by age group on the PAQ Parental Role in Providing Emotional Support subscale.

R4: Were there differences in the correlation between students’ overall percentage of demonstrated moral judgment competence and perceived parental attachment between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

H4a: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for males and for females.
H4b: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for Caucasians and for non-Caucasians.

H4c: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for students of different class standings.

H4d: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for students in different age groups.

**Definitions**

*Attachment:* “enduring affective bond that can promote autonomy” (Kenny & Donaldson, 1991, p. 480).

*Attachment behavior:* “cognitive, script-like structures that develop out of attachment experiences and expectations of parents in childhood” (Guttmann-Steinmetz & Crowell, 2006, p. 448).

*Attachment figure:* primary caregiver of a child whom “provides a secure base of support that promotes active exploration and mastery of the environment and the development of social and intellectual competence” (Kenny & Donaldson, 1991, p. 480).

*C score:* Score of between 1 and 100 that indicates the percentage of “the degree to which individuals accept or reject arguments in a discussion on a moral issue in regard to their moral quality rather than in regard to their agreement with his or her opinion (or other non-moral properties)” (Lind, 2008, p. 200).
Class standing: freshman, sophomore, junior or senior year of an undergraduate degree.

Helicopter parents: Meno, as cited in Boen (2007), described helicopter parents as those identified by their tendency to hover close to their child, ready to come to the rescue at the first sign of difficulty or disappointment.


Moral development: “growth of the individual’s ability to distinguish right from wrong, to develop a system of ethical values, and to learn to act morally” (Rich & DeVitis, 1994, p. 6).

Moral judgment competence: “the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments” (Kohlberg, 1964, p. 425). The Moral Judgment Test operational definition of moral judgment competence is “the ability of a subject to accept or reject arguments on a particular moral issue consistently in regard to their moral quality even though they oppose the subject’s stance on that issue” (Lind, 2008, p. 200).

Moral reasoning: the use of socially recognized standards to guide actions (Kohlberg, 1959).

Parental attachment: an emotional bond experienced with another who is sensed as a source of security and who provides a secure base anchoring exploration (Bowlby, 1988). The four accepted forms of parental attachment are secure, anxious-avoidant,

*Primary caregiver:* the individual who serves as the principal attachment figure of a child. Bowlby (1951) considered the mother as a child’s primary caregiver, but Geiger (1996) has found that the primary caregiver can be the father or third party.

*Student development theory:* “The ways that a student grows, progresses, or increases his or her developmental capabilities as a result of enrollment in an institution of higher education” (Rodgers as cited in Evans, Forney, & Guido-DiBrito, 1998, p. 4).

*Working models:* “A self-creation of the individual based on historical experiences with actual attachment figures” (West & Sheldon-Keller, 1994, p. 54).

These definitions are discussed further in the review of the literature.

**Delimitations**

There are several delimitations that restrict this study:

1. Only responses from students from two institutions in one geographic region were used in the study.

2. Perceptions of students were measured only once; a longitudinal study was not attempted.

3. No attempt was made to predetermine the level of parental attachment or moral judgment competence of potential subjects prior to data collection.

4. Socioeconomic status was not measured due to the difficulty of collecting this information using a self-reporting mechanism.
Limitations

1. Subjects represented undergraduate students between the ages of 18-25 from two campuses of a major university system in the northeastern United States. Findings are limited to this population only.

2. Faking of responses and response bias by subjects may have impacted results.

3. Demographic variables were collected from subjects’ self-reports and may not be accurate.

4. Use of a volunteer sample might limit the generalization to a larger population.

5. Due to the correlation design of the study, causal relationships cannot be inferred from statistically significant results.

6. The study uses self-report, so recall bias might have skewed data.

7. Nonresponse bias may have affected the reliability of data.

8. Study excluded various aspects of moral development and limits generalization to the type studied (moral judgment competence).

Significance of Study

Theorists have shown a bias against the role of parents in the development of moral judgment competence (Walker & Henning, 1999; Walker & Taylor, 1991), and there is a dearth of research on parents as conduits of moral development. The research that exists was conducted using school-aged children as subjects, and very few researchers have studied the influence of parental attachment on college students’ moral development (see Rogers, 1994). However, it seems rational to believe that parents do
influence the moral judgment competence of their children (Rogers, 1994; Thompson, 2006; Van Ijzendoorn & Zwart-Woudstra, 1995; Walker & Henning, 1999; Walker & Taylor, 1991). On the other hand, Waters, Corcoran & Anafarta (2005) challenged “belief in the notion that all good things go together” (p. 84) in regard to the impact of secure parental attachment on all positive developments in the affective domain throughout life. To settle this controversy, it is important to add to the literature base and further expand existing moral development theories regarding the influence of parents on moral judgment competence,

The influx of Millennials into college and the influence of their hovering parents have created challenges for higher education administrators (Atkinson, 2004; DeBard, 2004; Howe & Strauss, 2003; Levine Coburn, 2006; Wills, 2005). There is a need for greater understanding on how the helicopter parent phenomenon positively and negatively impacts students’ moral development. In addition, increased rates of academic dishonesty among Millennials have caused concern (Gismondi, 2006). Several factors may be responsible for this phenomenon, such as access to information via the internet and computer technology; increased parental pressure to achieve (Howe & Strauss, 2000); and more students working in addition to their studies (see National Center for Education Statistics, 2005). Finally, media coverage of high profile business ethical debacles has heightened awareness of the moral and ethical behavior of college students and their potential as future business and civic leaders (Farling & Winston, 2001; King & Mayhew, 2002). Obviously, there is a need to know more about the moral judgment
competence of Millennials. This research increased understanding on whether attachment behavior correlates with the moral judgment competence of Millennial college students.
Chapter 2

Literature Review

The purpose of this study was to determine if there exists a correlation between parental attachment and moral judgment competence of Millennial generation college students. In considering how parental attachment influences the moral judgment competence of college students, several areas were explored. First, characteristics and research on the Millennial generation and the phenomenon of helicopter parents are presented. An overview of attachment theory and findings from research on the impact of parental attachment on adolescents and adults is provided. Moral development theory and relevant research is also addressed. Finally, previous research on parental attachment and moral development is investigated.

Millennial Generation & Helicopter Parents

In the mid-1980s, renowned generational experts Neil Howe and William Strauss noticed that the burgeoning population born in the early 1980s was different than their older Generation X brothers and sisters (Huntley, 2006). Howe and Strauss called this time period the era of the wanted, protected, worthy, and perfected child (2003), all evidenced by the efforts of their doting parents.

Generational Differences

Demographers have identified six generations of United States citizens spanning over 120 years (Howe & Strauss, 2003). Each of these generations is defined by characteristics shaped by world and national events.
**Lost generation.** The first generation to be identified was the Lost Generation, born 1883-1900 (Howe & Strauss, 2003). These children had a rocky childhood while the nation faced such issues as massive immigration, lack of child labor laws, and urban decay. These children grew up to be rebellious young adults during the days of Prohibition, but they also established many modern economic sectors such as roadside commerce and aviation. This generation was impacted the most from the Great Depression, resulting in a distrust of public figures but also a sense of generosity and willingness to make personal sacrifices.

**G.I. generation.** The G.I. Generation, born 1901-1924, benefited greatly from the sacrifices of the previous generation (Howe & Strauss, 2003). They profited from changing laws involving child labor, increased investment in education, and new technology spurring medical advances. As heroes of World War II, they built American society and led the country for over 30 years in powerful positions. In their retirement they had a great sense of entitlement, but little remaining authority over society.

**Silent generation.** The Silent Generation, born 1925-1942, was the group of children born during the Great Depression and World War II (Howe & Strauss, 2003). A small generation, they were overshadowed by the G.I. generation war heroes and the huge population of baby boomers born in the decades after them. They married early and embraced careers in big companies with well defined pension plans. With a few noteworthy exceptions such as Martin Luther King, Jr., they tended to be extremely risk-adverse, preferring to work within the system rather than bucking it. Their adulthoods
were marred with complexity in family arrangements, political and social systems, and civil rights issues.

**Boom generation.** The most well-known generation is the Boom Generation, born 1943-1960 (Howe & Strauss, 2003). Born at the end of World War II, they were the most populous generation to date and were coined with the term “baby boomers.” In the patriotic aftermath of the Ally triumph, Boomers were raised in an optimistic environment with many advantages. They rebelled during the 1960s, becoming the flower children Vietnam War protestors who valued personal growth over conformity to their parents’ standards. As mature adults, they focused their lives on impacting values, cultures, and politics.

**Generation X.** Born 1961-1981, Generation X is filled with members who have faced the toughest environment for children on record (Howe & Strauss, 2003). Blighted by divorce, working mothers, low test scores, increased crime rates, sexually transmitted diseases, financial insecurity, and a bad reputation as slackers, Generation X grew up to be independent and pragmatic adults. Commitment-phobic, they delay marriage, avoid voting, and bounce from job to job, career to career.

**Millennial generation.** In 1982, the first members of the Millennial generation were born in an environment drastically different from their Generation X counterparts (Huntley, 2006). Their Baby Boomer and Gen X parents, many of them late to settle down and have a family, embraced these babies and concentrated solely on their protection and edification (Howe & Strauss, 2003). As a result, these children are showing characteristics that differentiate them from all previous generations. In
particular, there has been a dramatic shift from the pessimism of Gen Xers to a fundamental sense of optimism (Huntley, 2006). In fact, Huntley (2006, p. 10) refers to Millennials as “Generation Blue Sky” to reflect their wide-ranging view of the world as an open and friendly place where anything is possible. According to Howe and Strauss, “they are beginning to manifest a wide array of positive social habits that older Americans no longer associate with youth, including a new focus on teamwork, achievement, modesty, and good conduct” (2003, p. 14).

**Demographics of Millennials**

Over 80 million members of the Millennial generation populate America, and experts expect this number to be 100 million once all immigrants from this generation are counted in future years (Howe & Strauss, 2003). The largest generation to date, the 1980s-born Millennials are children of the Boom generation, while those children born in 1990 and beyond may be children of Generation Xers. More important than numbers, though, is the pro-child trend that seems to be constant among adults in this generation. “During the Gen Xer childhood, planned parenting meant contraceptives; during the Millennial childhood, it has meant visits to the fertility clinic” (Howe & Strauss, 2003, p. 18).

Almost 40% of Millennials are non-white or Latino, making it the most racially and ethnically diverse American generation (Howe & Strauss, 2003). Moreover, the Millennial generation contains more children of immigrants than any other generation defined by historians. Approximately 20% have one immigrant parent, and 10% have one non-citizen parent. Due to the influence of breaking television news and massive
resources at the click of a mouse, all Millennials consider themselves to be part of a larger world.

Interestingly, the trend setters in this generation are often minorities (Howe & Strauss, 2003). Latinos in particular are influential despite a high percentage living with immigrant parents in poverty and with high dropout rates. Asians are also beginning to be style-setters as well. The cultural tendencies of these non-white families are to embrace family, which is reflected in the core traits of this generation.

Millennials are a driving force in consumerism (Howe & Strauss, 2003). Over $172 billion was spent by Millennials in 2001, reflecting the commitment of parents anxious to give their children the best of everything. Even at the other end of the spectrum, poverty rates have been lower in this generations’ lives than ever, allowing even poor families to give into some of their children’s whims. Unlike Generation X, most Millennials do not rely on paid employment or allowances for their expenditures. Money is typically provided by parents through gifts or payment in return for chores. Howe and Strauss (2003) also identified a third source of funding for Millennial expenditures: “direct ad-hoc payment from parent to child, often for a specific purchase on which the parent and child confer” (p. 41). This has influenced marketers to target both parents and children in their advertising efforts.

One striking characteristic of the Millennial generation is the parent-guided structure of their days (Howe & Strauss, 2003). Children ages 3 to 12 in 1997 were found to have only 33 hours of unstructured free time each week, a 37% decline from the 52 hours enjoyed by their predecessors in 1981. More children are in school longer hours
and at younger ages due to working parents, after-school programs, extracurricular activities, and expanded school years. Children are also responsible for more household duties and spend more time grooming and traveling from activity to activity.

**Core Traits**

Howe and Strauss (2003) identified seven core traits of Millennials: (a) special; (b) sheltered; (c) confident; (d) team-oriented, (e) conventional, (f) pressured, and (g) achieving.

**Special.** From the very beginning, Millennials have been embraced by their parents and society as extraordinary. As a result, Millennials believe “that they are, collectively, vital to the nation and to their parents’ sense of purpose” (Howe & Strauss, 2003, p. 51). Almost all national discussions revolve around the impact issues have on children, and most Americans feel that successfully raising children should be the nation’s primary goal. As a result, Millennials have developed a far-reaching trust of society to ensure their well-being. In contrast, however, they are also more willing than previous generations to acknowledge culpability for their own mistakes. As a result, this generation is confident that they have what it takes to create a better America. Moreover, their parents agree.

**Sheltered.** Millennials have been protected and sheltered from the day they were born (Howe & Strauss, 2003). Safely harnessed in a car seat, a “baby on board” yellow sign warning other drivers of precious cargo, Millennials came home from the hospital cocooned in safety measures. Unlike the tempered protection of Boomers and non-existent sheltering of Generation Xers, Millennials have been the recipients of increased
attention to their safety and security. New policies, laws, regulations, and warnings have enveloped the generation, and Millennials have been conditioned to expect protection. In fact, they are the first generation to demand even more protection as was evidenced after the Columbine shootings spurred requests from students for increased security in schools.

**Confident.** Probably because they feel wanted and are sheltered, Millennials feel like they can conquer the world (Howe & Strauss, 2003). They have closer ties to parents than previous generations, and they show a greater faith in institutions as well. Most importantly, they share a sense of optimism about the future, both individually and collectively. The American Dream is in their grasp. Their current focus is on balance between school, recreation, and friends. Their focus for the future is on balancing work and family and recreation, and more Millennials care about making a difference than making money in the future.

**Team-oriented.** Millennials are the first generation to begin competing in organized sports at the ripe old age of three. In a time when previous generations were more interested in chasing butterflies and fighting over toys, Millennials have spent their Saturday afternoons at playing fields learning the basics of sportsmanship. This is just one example of how Millennials are embracing teamwork and cohesion with their peers (Howe & Strauss, 2003). Millennials disavow disorder, insisting upon an environment of good behavior, proper manners, and mutual respect. Unlike their Gen X counterparts, peer pressure often has positive effects for Millennials. This generation holds value in high moral character over creativity and autonomy in their peer leaders. As a result of their team orientation, Millennials often travel in packs, preferring to hang out with a
group of people rather than just one or two friends. College-aged Millennials also stay in touch with their high school friends more than any previous generation, probably due in part to technological advances. In fact, the increased availability and use of the Internet, social networking websites, and cell phones have made it easier than ever for Millennials to have and maintain ever-widening circles of friends. Politically, Millennials are rebelling against Generation X’s tendency to favor individualism. Millennials see the world as a team in which all people are equal and should work together. Interestingly, Millennials feel that most gender and ethnic inequalities are resolved and are focusing on socioeconomic class as an issue of injustice. In fact, Millennials are far more likely to date outside of their race than outside of their social class. Inequities surrounding class issues will have far reaching consequences as the generation assumes power positions, just as race relations and gender equality had for their parents.

Conventional. Millennials love rules (Howe & Strauss, 2003). Rules make them feel secure, loved, and grounded. Millennials see parents as their trusted mentors and friends, and almost all feel like their parents love them unconditionally. Millennials are more prone than any other generation to accept their parents’ value systems, and many are in favor of a more value-driven society. Teens are much less likely than their parents’ generation to have used alcohol, marijuana, or tobacco; to approve of premarital sex; or to have a teenage pregnancy. They also are in favor of less violence on television, fewer divorces, and the teaching of abstinence in schools. Moreover, Millennials are searching for meaning through religion and other mechanisms of spiritual development.
Pressured. From their conception, parents of Millennials were already thinking about preparing them for college. From reading books to them in the womb to enrolling them in every academic, athletic, or social development class offered, Millennials have felt the pressure to succeed for their entire lives (Howe & Strauss, 2003). As college approaches, an ever-increasing number of highly qualified teens compete for limited spots at top colleges, which sends a message that Millennials must do more and do it better than their peers. “The formula for youth today is: Success in life is the reward for effort plus planning” (Howe & Strauss, 2003, p. 61). As a result, teens experience more pressure than any previous generation. They and their parents respond by carefully categorizing their time so that every moment is maximized. Instead of a time of freedom and discovery, childhood has become a time of sacrifice and structure in order to compete with their peers.

Achievement. Millennials are motivated by achievement (Howe & Strauss, 2003). Most teenagers have a defined list of short-term and long-term goals and have researched these goals in order to create a task list and timeline for completion. But this does not mean that Millennials like school more than other generations; they focus on finding a balance between work and fun. As a result, they are more likely to rate math and science higher than social studies and the arts, perhaps because the former fields produce more lucrative careers than the latter.

Millennials & Student Development

Strange (2004) hypothesized that current college student development models may need to change to accommodate the Millennial generation. Millennials’ tendency to
identify with a group and to maintain close attachments with their parents threaten psychosocial-identity models such as Chickering’s vectors and Ericson’s stages of human development. These theories concentrate on developmental tasks and the interplay between individuation, gaining independence from others, and attachment, connecting with others. In psychosocial-identity theory, development is achieved when the person rejects attachment, seeks individuation, and then re-establishes connections again.

Because of generational characteristics, Strange (2004) speculated that Millennials might not seek individuation in the same way previous generations have. In fact, Strange (2004) even suggested that the current focus on individuation might be viewed as “a sign of regression and immaturity rather than positive growth” (p. 54). This does not preclude development, but it may indicate that theory revisions are in order. Chickering and Reisser (1993) have responded with changing the concept of independence to interdependence in their model.

Typology theories maintained that individuals display consistent characteristics that direct how they tackle problems and approach developmental challenges (Strange, 2004). In a generation that values teamwork and cohesion with peers (Howe & Strauss, 2003), more students will be identified as extroverts according to the Myer’s Briggs Type Indicator, social according to Holland’s Vocational Preference Inventory, and accommodators (emphasizing concrete experience and active experimentation) in Kolb’s Experiential Learning Theory (Strange, 2004). While the typology theories may not require revision, the efforts placed on translating theories to practice will become more important for practitioners.
Specific to this study, cognitive-development models such as Kohlberg’s theory of moral development might not be fully realized in Millennials due to their acceptance of convention, authority, and rules (Strange, 2004). Then again, their unique view of the world and their place within it may generate more advanced levels of cognitive development.

From the perspective of cognitive development . . . the Millennial generation’s acquiescence to authority and social conventions might loom large in their developmental journey through intellectual and moral reasoning. For advancement to occur on most schemes of this nature, a form of personal autonomy and rejection of external authoritative bases of decision making are imminent. Could it be that the deference exhibited by such individuals might jeopardize or delay development in that regard? On the other hand, this generation of students comes to campus with a much greater exposure to moral relativism and the diversity of a politicized society. Perhaps these dynamics will, in fact, accelerate the kinds of contextual patterns that contribute to more advanced modes of thinking. (Strange, 2004, p. 54)

More study is needed to understand the cognitive development of Millennial college students.

Parents of Millennials

**Boom Generation Parents.** No discussion of Millennial generation college students is complete without a discussion of the unique characteristics of their parents. Older Millennials were parented by the Boom generation, born 1943-1960 (Howe & Strauss, 2003), while younger Millennials were parented by members of Generation X. Most literature involving the parents of Millennials concerns the Boom generation. With characteristics such as self-confidence, authority, and cynicism as well as a tendency to take charge (Howe & Strauss, 2000; Lancaster & Stillman, 2002; Zemke, Raines, &
Filipczak, 2000), Boomers shaped an environment for their children unrivaled in past generations.

Boomers scheduled and arranged every hour of their children’s lives from day one (Levin Coburn, 2006). From “Mommy and Me” music classes for their infants, to toddler soccer games, to adolescent French lessons, Boomers ensured that their children have access to build the skills and abilities they will need to achieve. As a result, Millennials are more achievement-oriented, confident in their abilities, and accustomed to working in teams than any other generation (DeBard, 2004). They also experienced higher levels of stress and pressure. Despite this, Millennials feel treasured by their parents, leading to a tendency to conform to the wishes of their elders and a deep respect for institutions, community, and family. In addition to providing access to opportunities, Boomers also forged very strong relationships with their children, more so than any previous generation (Howe & Strauss, 2003). At least 75% of Millennials reported that they have a good relationship with their parents, and only 3% said they do not get along with their parents (Verhaagen, 2005). Most Millennials reported that they like to spend time with their family and wish they could spend more time with them, and about 50% name a family member as their primary role model.

It is the Boomers that have created both the conditions for [Millennials’] future success and the barriers to its full development. . . . They are feeling their way towards a life philosophy that is both shaped by and defined in opposition to the Boomer’s experience. (Huntley, 2006, pp. 20-21).

Despite the fact that Boomer parents created a welcoming and supportive environment for their children, they also contributed to a society where Millennials will find it hard, if not impossible, to obtain the economic security and community enjoyed by
previous generations. Although Millennials revere and rely on their parents, they do not necessarily feel that Boomers have set the best example. Where Boomers can have a tendency to be workaholics, Millennials seek balance. While both Boomers and Millennials value possessions, Millennials do not believe that possessions are the key to happiness. And while Boomers allowed relationships to wither in search of economic or professional fulfillment, Millennials aspire to have lasting marriages, quality connections with family and friends, and jobs that allow time for both.

**Generation X Parents.** According to Howe and Strauss (2007), Gen Xers have demonstrated an even more tenacious parenting style than Boomers. Partly because they are the generation that defined latchkey kids, Gen Xers are committed to giving their children more attention and support than they received. In addition, more Gen Xers than Boomers believe that a college education is critical to their children’s future success. Feeling the pinch of economic downturn, Gen Xers place more emphasis on financial security (Clack, 2004). To this end, 63% of Gen Xers began saving for college when their children were in elementary school (Jayson, 2007).

**Helicopter Parents.** No matter what generation they represent, parents of adolescent Millennials continue to be directly involved in their children’s lives even into the college years. In 1990, the term “helicopter parent” was coined to describe the phenomenon of parents “hovering” around their children (Cline & Fay, 1990). Identified as an “ineffective parenting style” by Cline & Fay (1990, p. 23), helicopter parents have hit the campus with vengeance since the Millennial generation began entering college in the year 2000. Helicopter parents are still involved in their adult children’s day-to-day
life (Levin Coburn, 2006). It is not unusual for a parent to call a professor to complain about a child’s grade, for parents to make their children’s appointment at the student health center, or for parents to call their children every morning to ensure they are up in time for class. Orientation parent programs have titles such as “Between Mothering and Smothering, Between Fathering and Bothering” at the University of Southern California to “May They Follow Your Path and Not Your Footsteps” at Ohio Northern University (Howe & Strauss, 2003, p. 11). In fact, the University of Vermont hired “parent bouncers” for their orientation program in an effort to separate parents from their children during sessions so that the students can start finding independence and begin the transition process (Wills, 2005).

In 2007, the National Survey of Student Engagement (NSSE) surveyed 313,000 students at 610 institutions to determine their level of engagement in college (NSSE, 2007). NSSE also surveyed a subgroup of 4,518 freshman and 4,644 seniors at 24 institutions to find out more information about support systems such as parents, peers, etc. Results showed that 70% of students communicate very often with at least one parent during the academic year, with mothers being the primary support person for both males and females. Electronic communication was the most used mechanism for contact. Students said they talked to their mothers about personal problems and family issues, to their siblings and friends about personal, social or family issues, and to both their mothers and fathers about academics. About 75% said they asked for and followed the advice of a parent, while only 45% acted on suggestions by their siblings. Even fewer followed advice given by friends (27 to 39% depending on class level and type of friend).
There was not much difference in the number of freshmen and seniors who stayed in touch with their mother and father either through face to face or electronic communications (NSSE, 2007). Eighty-six percent of both freshman and seniors stayed in touch with their mothers electronically, and 71% of freshmen and 73% of seniors did the same with their fathers. Students were less likely to have in-person contact with both parents, but seniors were slightly more likely to do so than freshman. Sixty-five percent of seniors saw their mothers and 57% saw their fathers while 62% of freshman saw their mothers and 54% saw their fathers.

Helicopter parents have the reputation of stepping in to handle problems for their children, and the NSSE validates this perception (NSSE, 2007). Thirty-eight percent of freshman and 29% of seniors reported their parents sometimes or frequently intervene on their behalf. These same students reported higher levels of support, engagement, and satisfaction, as well as higher participation in enriching learning activities and other desired college outcomes. This refuted speculation that parent intervention can halt or slow student development in college. However, these students also reported lower grades than their peers, but NSSE interpreters suggested parents who are involved in their children’s college lives encourage retention of underperforming students (Wong Briggs, 2007).

A group of researchers sub-categorized helicopter parents into five groups: (a) Blackhawk, (b) Toxic, (c) Consumer Advocate, (d) Safety Expert, and (e) Search and Rescue Helicopters (Shellenbarger, 2007). Blackhawk parents immediately strike at problems their children are facing with zeal, and they show a willingness to engage in
unethical behavior to make things right for their child. These parents tend to go straight to the top, calling the university president or vice-presidents for assistance on minor issues. Their efforts can have the effect of diminishing their children’s budding independence.

Toxic parents covertly undermine their children by keeping tabs of their behavior and taking charge of things that are of importance to their students (Shellenbarger, 2007). This has the effect of making their children feel unworthy and unable to handle aspects of their own lives. Consumer Advocate parents view higher education as an investment and expect that faculty and staff will comply with their demands for better customer service and a guarantee that the educational outcome will be a high-paying job. These parents demand access to their child’s records, disregarding the Family Educational Rights to Privacy Act (FERPA) guaranteeing confidentiality of records without the student’s consent.

Safety Expert parents have multiplied since the Virginia Tech shootings in April, 2007 (Shellenbarger, 2007). These parents want assurances that their children are protected on the college campus and that their students’ every move is safeguarded. Finally, the most harmless helicopter parents are the Traffic parent and Rescue parent. Traffic parents give their children autonomy to make their own choices but provide help and counsel. Rescue parents jump in to help in a crisis with financial and emotional support.

Experts believed that 60 to 70% of parents can be classified by one of the helicopter styles (Jayson, 2007). The helicopter phenomenon crosses all socioeconomic classes and racial and ethnic categories. In fact, one of the primary reasons parents have
for their hovering behavior is the rapidly increasing cost of higher education, which is
taking a toll on all classes and races. Other reasons included the fact that Millennials are
part of smaller families, technology such as cell phones and the Internet have allowed for
closer communication, and parents are more worried about their children’s safety after
such threats as the September 11 terrorist attack, Oklahoma City bombing, and the
Virginia Tech shootings. Furthermore, many Boomers and Gen Xers attended college,
and they may be trying recapture this experience by living vicariously through their
child’s college career.

**Implications for Higher Education**

Regardless of whether a child is parented by Boomers or Xers, they can expect
their parents to hover around them as they matriculate in college (Howe & Strauss, 2007).
Higher education administrators must be prepared to work with parents on a greater level
than ever before (Levin Coburn, 2006). Moreover, many students will also come in with
a team of experts such as family lawyers, physicians, and counselors to address problems
and issues (Howe & Strauss, 2003). Parents of Millennials want to be involved, but
higher education administrators face the challenge of capturing this enthusiasm and
channeling their efforts in a positive manner without feeling threatened. Parents need to
understand that children must be allowed to embrace their independence and make their
own mistakes in order to develop into a fully functioning, capable adult. “Parents who
understand the basic principles of student development have an easier time appreciating
our reluctance to notify them or to intervene in situations that we think students should
handle themselves” (Levin Coburn, 2006, p. 12).
According to Strange (2004), higher education administrators need to keep the core traits of the Millennial generation in mind as they develop and deliver programs and services. Because Millennials are conventional and are sheltered and have their days organized by parents, they need more support and programs must be infused with more structure than has been required in the past. In addition, their orientation toward achievement and having every hour of the day scheduled has caused increased pressure and stress for this population. Administrators are called upon to help students relax and prioritize their time. Millennials consider themselves to be special, and their parents agree and have made these children the center of their world. Higher education administrators can expect this to have a far reaching impact on the way they respond to students and parents. There is a high expectation for excellent customer service, immediate responsiveness to demands, and a focus on increasing standards. Moreover, these helicopter parents are hard pressed to let their children handle problems on their own, resulting in increased communication between higher education administrators and parents. Finally, the confident, achievement, and team-oriented nature of these students require that higher education administrators increase the number of student activities and leadership positions available to effectively engage all students that want to get involved. However, this same group of over-achievers need assistance with organizing their activities and carefully defined roles in order to succeed.

Administrators also need to keep the needs of parents in mind and be prepared to offer orientations, transition seminars, visitation weekends, newsletters, websites, e-mails, etc., targeted at parents (Howe & Strauss, 2003). These vehicles provide two
functions, (a) satisfying the parents desire to stay connected with their children; and (b) offering administrators a concrete way to share with parents the tenets of student development theory so that they understand the importance of letting their children make their own decisions and mistakes.

Ironically, the very generation that pushed for the passage of the Family Educational Rights to Privacy Act (FERPA) in 1974 is now being restricted by it in accessing their children’s records (Howe & Strauss, 2003). Originally designed to prevent draft boards and other governmental entities from seeing students’ educational records, FERPA was not meant to prevent parents from viewing their children’s records, but through the 70s and 80s this was considered an acceptable consequence for the other protections the act offered. Boomers “are no longer FERPA’s protected class, but rather the class from whom others are being protected: namely, their children” (Howe & Strauss, 2003, p. 81). Thus, it is extremely important for administrators to educate parents and students about the restrictions of the act as well as students’ ability to waive their protection under FERPA to allow the release of information to parents. Lawsuits have lead to speculation that FERPA may be revised in the future to allow open parental access to their children’s educational records, but this will place a larger burden on higher education administrators to monitor records and notify parents when there seems to be a problem stewing.

Higher education administrators are grappling with these issues and how to capitalize Millennials’ connection with parents and still nurture student development. “It is a new challenge of college administrators to persuade parents to ‘let go,’ just a little bit
more with each passing year, with confidence that their come-of-age Millennial children remain in very good hands” (Howe & Strauss, 2003, p. 81).

**Summary**

The Millennial generation is more populous, prosperous, educated and diverse than any previous generation (Howe & Strauss, 2000). They are considered special and are very sheltered by their parents, which results in confident youth. Millennials are closer to their parents than any other generation (Howe & Strauss, 2003), but does this connection automatically ensure secure attachment to parents? This same connection with parents has also led to a tendency to be conventional, threatening cognitive development (Strange, 2004). Do Millennial students have similar levels of moral judgment competence as their predecessors? And are Millennials’ attachments to parents connected to moral judgment competence? This study answers these three questions.

**Attachment Theory**

**Precursors to Attachment Theory**

Throughout the 20th century, researchers studied the connection between parents and children and how that bond influences adolescent and adult development. Hull (1943) theorized that since hunger is a primary driver for all animals and that the mother or caretaker provides nourishment to the infant, the infant bonds with the mother or caretaker through classical conditioning. Through this process, a secondary drive of maintaining presence with the caretaker is formed.

Freud (1948) explained attachment through a psychoanalytic view. Mercer said “Freud based his thinking about attachment on the belief that feeding creates the child’s
emotional presence” (2006, p. 15). Freud hypothesized that the infant creates an internalized image of the mother as a dependable and nurturing person. He believed that as the infant grew, the internalization of this image nurtures a general perception of others as a means to help meet his or her needs, both physical and psychological.

**Bowlby’s Theory of Attachment**

John Bowlby’s ideas about attachment departed from previous theories. He believed that attachment grew from social interactions rather than from feedings or physical gratification (Mercer, 2006). Bowlby (1977) defined attachment as “the propensity of human beings to make strong affectional bonds to particular others” (p. 201).

Bowlby (1951, 1979, 1982) theorized three basic functions for attachment: (a) proximity maintenance, (b) safe haven, and (c) secure base. Proximity maintenance occurs when children are alarmed by some type of perceived danger that causes them to seek comfort from attachment figures (Ainsworth et al., 1978). Safe haven describes how the child uses the attachment figure as a source of comfort, support and reassurance (Bowlby, 1951, 1979, 1982). Secure base is the term to express how secure infants are more apt to explore the environment when they feel confident that they are safe and secure based on proximity to their attachment figures. The infant uses “the mother as a secure base from which to explore” (Ainsworth et al., 1978, p. 22).

Attachment serves two purposes: (a) protection and (b) instruction (Bowlby, 1979). In times of danger, attachment behavior serves to keep the child close to the primary caregiver for protection. When no danger is present, the primary caregiver serves
as a safe haven as the child explores unfamiliar environments. As a biology-based behavioral system, attachment tempers the risks of exploration while promoting development (Bretherton, 1985). Attachment patterns are created based on the balance of support and autonomy (Ainsworth et al., 1978; Bowlby, 1982). According to the theory, real-life events and the action or inaction of parents in response to these events result in a particular attachment style in children. Thus, “infants . . . adapt their own behavior in accordance with the care they experience” (Guttmann-Steinmetz & Crowell, 2006, p. 442). This behavioral response occurs without conscious thought (Main, 1990).

There are two main features of caregiver-child interactions (Bowlby, 1951). Behaviors are activated in the infant as a result of stress. Attachment behaviors serve to reduce arousal and provide security. Secondly, because caregivers will reciprocate by monitoring the infants’ safety and security, the infant remains safer and more secure.

For secure attachment to occur, the caregiver must be available and respond quickly to the infant’s distress (Bowlby, 1951). This prompt responsiveness helps the child to avoid excessive negative effects and creates a sense of security. The security advances exploration and mastery of the physical and social environments which encourages further development.

In order to understand what happens when the child does not gain secure attachment to a caregiver, Bowlby (1951) studied homeless infants. He found that the infants followed a somewhat standard pattern. When the infant is separated from an attachment figure, the child cries and actively searches for the caregiver and resists soothing from others. As the separation continues the child becomes obviously sad and
passive. This leads to emotional detachment when it becomes obvious that the caregiver will not return.

The mother was considered as the primary caregiver in Bowlby’s research (Bowlby, 1951). However, the principal attachment figure does not have to be the mother. The father or other principal caregiver can be the primary attachment figure (Geiger, 1996). In fact, both parents are important. The majority of children develop more than one attachment relationship during the first year of life (Cassidy, 1994).

Bowlby was interested in attachment not only to explain infant behavior but to explain behaviors from cradle to grave (Bowlby, 1977). He believed that early attachment behaviors affect an individual’s personality development. He was particularly interested in how attachment history may influence mental health and criminal behavior (Mercer, 2006). Bowlby’s (1982) research found that human beings at any age are most well-adjusted when they have confidence in the accessibility and responsiveness of a trusted other. This confidence is gained through secure attachment with a principal caregiver.

**Ainsworth’s Strange Situation Experiment**

Ainsworth et al. (1978) provided additional research on Bowlby’s theory of attachment. Their experimental research, called “The Strange Situation Experiment,” involved observing mothers, children and strangers in a series of situations in which the parent leaves the child and a stranger enters the area. Their research studied children from the ages of 12 to 18 months. West and Sheldon-Keller (1994) pointed out that “almost all
subsequent empirical and theoretical work on attachment in infancy is based on Ainsworth’s methodology” (p. 14).

Elicker, Englund, and Struofe (1992), monitored children for 10 years and found predictable personality and social behaviors based on their attachment history with their parents. Other researchers (Levy, Blatt, & Shaver, 1998) monitored subjects 20 years and found that 64% of subjects did not show a change in their attachment patterns. This research supports the theory that attachment behaviors are unlikely to change over time.

Ainsworth (1985) defined five characteristics that distinguish an attachment relationship from other relationships: (a) the attached person seeks proximity to the caregiver, particularly when they are frightened or alarmed; (b) the caregiver provides protection and care (safe-haven function); (c) the caregiver provides a sense of security (secure base function); (d) the threat of separation causes anxiety in the attached person; and (e) loss of the attachment figure would cause grief in the attached person.

**Basic Patterns of Attachment**

There are four recognized patterns of parental (caregiver) attachment: (a) secure; (b) insecure or anxious-avoidant; (c) insecure or anxious-resistant (Ainsworth et al., 1978); and (d) disorganized-disoriented (Main & Solomon, 1990).

**Secure.** A child demonstrating secure attachment will use the mother or caregiver as a secure base from which to explore an unfamiliar environment (Ainsworth et al., 1978). Secure children actively investigate a new situation when an attachment figure is present but become distressed when left alone. When the attachment figure comes back, the child seeks close contact and comfort and then resumes play quickly. Additionally,
the child’s interaction with their primary caregiver is more harmonious. Secure children understand that their attachment figures are accessible and responsive, and they are easily calmed and reassured after a threatening situation (Guttmann-Steinmetz & Crowell, 2006). The child is quickly soothed by close bodily contact with caregiver. The child also appears to be less anxious (Ainsworth et al., 1978). Research on mothers of secure infants has revealed that they respond to distress with sensitivity and are generally available and cooperative (Ainsworth & Eichberg, 1991; Levy et al., 1998; Van Ijzendoorn, 1995). Thus, secure children feel comfortable with expressing their emotions and communicating their desires to caregivers, and they are confident their needs will be addressed (Bretherton & Munholland, 1999).

**Anxious-Avoidant.** The second pattern is called anxious-avoidant (Ainsworth et al., 1978). These children have a decreased need for physical contact from the caretaker after a separation. Research on the mothers of these infants has revealed they find close contact aversive and are rejecting of their infants. These caregivers seem remote, rejecting and quick to anger. The focus of these attachment figures seems to be on encouraging independence, and they respond with limited emotion and physical affection (Ainsworth & Eichberg, 1991). Like secure children, anxious-avoidant children explore the new environment but are not bothered by the departure of the attachment figure. The child blatantly ignores the attachment figure’s return, concentrating solely on the environment. Thus, anxious-avoidant children avoid or minimize the importance of their emotions and seem outwardly calm and indifferent (Cassidy, 1994) However, they
have been found to have higher stress levels than secure or anxious-resistant children (Gunnar, 2000).

**Anxious-Resistant.** Children who are classified as anxious-resistant display intense distress when their caretaker leaves, and they are unable to be calmed when the caretaker returns (Ainsworth et al., 1978). These children lack confidence in caregiver’ reactions (Peluso, Peluso, White, & Kern, 2004). Research on the mothers of these children found they are more self-preoccupied and more sensitive to their own needs than those of their children (Levy et al., 1998). These caregivers are observed to be unpredictable and indifferent, which results in the children’s tendency to cling to their attachment figure and show disinterest in the surrounding environment (Ainsworth et al., 1978). Their primary focus is on the attachment figure, and the child is tremendously upset when they are separated. Anxious-resistant children exaggerate their distress in a strange situation, and project feelings of distress, anger, and anxiety in order to gain the attention of the inconsistent caregiver (Cassidy, 1994). The inability to be consoled results from the child’s fear that calming down will result in losing the caregiver’s attention.

Both types of anxious infants appear angry and antagonistic (Frankel & Bates, 1990). They cry more, act more aggressively, and are more controlling and domineering than their secure counterparts (Main & Cassidy, 1988). The interplay between the insecure types shows a pattern of victimization where the avoidant children are the antagonists and resistant children are victims (Troy & Sroufe, 1987).
Disorganized-Disoriented. The fourth category of disorganized-disoriented was added later (Levy et al., 1998; Main & Solomon, 1990). Disorganized-disoriented children appear to be confused about how to respond to their caregivers, and they are more likely to have been maltreated by parents (Lyons-Ruth, Connell, Zoll, & Stahl, 1987). They seem frightened by the caregiver, and may tend to avoid or resist his/her approaches. One striking characteristic is that infants may become very still when the caregiver is present (Main & Hesse, 1990). Parents of these children are more anxious, depressed, and abusive. These parents may be troubled by their own attachment-related traumas and losses (Belsky & Cassidy, 1994). Research has shown that parents of disorganized-disoriented children are more likely to be alcoholics (Lyons-Ruth & Jacobvitz, 1999) and/or involved in violent partner relationships (Steiner, Zeanah, Stuber, Ash, & Angell, 1994).

In summary, the difference between the attachment styles can be described as a continuum where secure children balance their desire for the attention of attachment figures and their interest in exploring the environment (Ainsworth et al., 1978). Bowlby (1980) maintains that children will exhibit some sort of attachment behavior as a survival technique regardless of the environment in which they are raised.

Working Models

A working model has been defined as “a self creation of the individual based on historical experiences with actual attachment figures” (West & Sheldon-Keller, 1994, p. 54). Bowlby (1982) referred to the construction of “working models that are based on actual experience but are used to extrapolate those experiences to novel situations.”
A working model is created and internalized by children as they establish a stable pattern of attachment which is based on the continuing contact with their caregiver (Heiss, Berman & Sperling, 1996). A working model may be partly conscious and partly unconscious. Individuals are often not aware of their internal working models. The model may not always be completely consistent or coherent (Levy et al., 1998).

A working model is a set of expectations about the likelihood that attachment figures will provide support during times of stress (care giving), as well as expectations about how one will interact (care seeking) with attachment figures (Bowlby, 1973). Working models are not composed only of behaviors, but are composed of affective, cognitive, and perceptual components (Chisholm, 1996). They impact the way people interpret situations as well as how they feel, think, and act.

Bowlby (1982) was interested in how attachment influenced future behavior and personality. By understanding how early attachment behaviors create working models one can begin to predict future behavior. The working models create a useful framework for guiding behavior as one interacts with the attachment figure and others. The working model also enables one to predict one’s own behavior as well as the social behavior of others (Kerns, 1994). Most importantly, working models pave the way for attachment throughout an individual’s lifetime.

**Attachment Throughout the Lifespan**

Although attachment seems most evident in infants and children, researchers have found that attachment behavior is relatively steady throughout life (Sroufe, 1988; Waters, Hamilton & Weinfield, 2000). As children age, their attachment style becomes the
working model for expectations of their relationship with others. Engrained attachment behavior influences trust in others and individual self-worth. Every behavioral transaction is subject to the lens with which an individual views the world based on their attachment style (Bowlby, 1980). While parent-child relationships become physically distant with time, psychological attachment is effectively maintained through long distance communications (Bowlby, 1982). Thus, it appears that Millennial college students who keep in contact with their hovering parents via e-mail and cell phone are merely maintaining their attachment relationships. Weiss (1982) found that contact with parents is not as important as perceived parental dedication, but one wonders if with Millennials, accessibility is just as important as devotion.

**Adolescent & College Student Attachment**

Separation-individuation is a key process of adolescent development (Kalsner & Pistole, 2003). The way adolescents make this transition is related to their attachment to their parents. The student with secure parental attachment is more likely to continue to seek them out in situations of stress and view them as an available source of support when needed (Kenny, 1987). This is conducted in a way that does not threaten independence but supports the development of autonomy. While it may seem counterintuitive, connection with one’s parents is important in facilitating autonomous behavior (Josselson, 1988).

When a student goes off to college they face a transition from childhood to adulthood. They begin to disengage from childhood and learn to function in the college environment on their way to becoming an autonomous adult (Kalsner & Pistole, 2003).
They undergo many changes that are similar to the design of the strange situation experiment by Ainsworth. As in Ainsworth et al.’s (1978) experiment, these new college students are expected to explore and master their new environment in situations of stress and emotional discomfort. While experiencing this stress, their parent(s) may serve as a secure base of support by offering help, which enables students to feel more confident (Kenny, 1994). As adolescents move into the adult world they face emotionally challenging exploration into diverse new roles and settings. This often mirrors many of the separation struggles of early childhood (Blustein, Prezioso, & Schultheiss, 1995).

Most adolescents and their parents have to develop ways of negotiating separation after having shared a close relationship that evolved from early attachment ties (Mercer, 2006). When the student moves away from home, his/her behaviors promoting proximity to attachment figures become less intense and less frequent. Because they may not see their parent(s) on a regular basis, their communication (phone calls, e-mail, etc.) becomes increasingly effective and important in providing comfort (Armsden & Greenberg, 1987).

What role does attachment style have in the development of adolescents and college students? Many researchers have correlated attachment to peers and parents or solely parents to a variety of different characteristics. Researchers rely on two primary instruments to measure attachment quantitatively: (a) Inventory of Parent and Peer Attachment (IPPA); and (b) the Parental Attachment Questionnaire (PAQ).

The IPPA was developed in the mid-1980s by Armsden and Greenberg (1987) to measure adolescent attachment. The IPPA concentrates on attachments with peers and with parents due the suggestion of researchers (see Bretherton, 1985; Greenberg, Siegal,
Leitch, 1984; Kahn & Antonucci, 1980; Lerner & Ryff, 1978; and Weiss, 1982) that attachment to parents develops children’s working model of relationships and that adolescents use these models to form peer attachments. The IPPA consists of 75 questions to measure attachment to mother, father, and peers (Armsden & Greenberg, 1987). For each attachment figure, the instrument measures subscales of trust, communication, and alienation. These three subscales have proven to be highly reliable, with a Cronbach’s alpha of .91, .91, and .86 respectively, and the overall instrument has shown a test-retest reliability of .93 for parents and .86 for peers. The instrument is moderately correlated with the Family Environment Scale (FES; Moos, 1985) and the Parental Attachment Questionnaire (PAQ; Heiss et al., 1996). The IPPA has been used on primarily Caucasian samples, but a few studies have found that non-Caucasian participants indicate lower levels of attachment on the instrument than their counterparts.

The Parental Attachment Questionnaire (PAQ) was developed by Maureen Kenny in the 1980s to measure Ainsworth et al.’s (1978) concept of perceived attachment in adolescents and young adults (Kenny, 1985). The 55-item instrument measures subjects’ perceptions of parental availability, acceptance, emotional support, and ability to cultivate independence, as well as students’ satisfaction with parental support and coping techniques in times of stress. The instrument consists of three scales derived from factor analysis: (a) Affective Quality of Attachment; (b) Parental Fostering of Autonomy; and (c) Parental Role in Providing Emotional Support. The items are presented on a 5-point Likert scale (where 1 is not at all and 5 is very much), and scores are calculated for each scale. Students are asked to consider their parents as a single unit when responding.
Research has shown that overall family environment is more important than individual relationships with parents (Kenny, 1994). However, instrument instructions allow for students to consider only one parent, both parents, or an alternative attachment figure if separation, divorce, death, or re-marriage have broken the family unit. The PAQ has been found valid and reliable, with a .92 test-retest score over a 2-week interval for the instrument as a whole, and scores ranging from .82 to .91 for each of the three scales (Kenny, 1990). Cronbach’s alpha was .96 for the first scale, .88 for the second, and .88 for the third (Kenny & Donaldson, 1991), and internal consistency as .93 for male and .95 for female students (Kenny, 1987). The PAQ has been favorably compared with subscales from other instruments measuring similar constructs such as the Moos Family Environmental Scale (FES; Moos, 1985; Kenny & Donaldson, 1991); Family Adaptability and Cohesion Evaluation Scale (FACES-III; Olson, 1986; Holmbeck & Wandrei, 1993); and the Inventory for Peer and Parental Attachment (IPPA; Armsden & Greenberg, 1987; Heiss et al., 1996). In a study to assess five different scales of parental attachment, Heiss et al. (1996) found that the PAQ has convergent and construct validity. Using factor and correlational analysis, the researchers found that the PAQ adequately assessed constructs of attachment theory in relation to the other scales and had the expected correlation with scores on various personality criterion scales.

**IPPA studies.** Many research projects have studied the impact of both parent and peer attachment on adolescent development with the IPPA instrument. In their longitudinal study of 77 families with high school freshmen children, Allen, Hauser, Bell, and O’Conner (1994) found that attachment behavior and the tendency to use parents as a
secure base for exploration continues into adolescence. Laible, Carlo, and Raffaelli (2000) assessed the influence of parent and peer attachment on 89 middle school and high school students. They found that both types of attachment are important to adolescents and had a similar impact on their levels of sympathy, aggression and depression. In this study, secure peer attachment showed a slight advantage over secure parent attachment, but adolescents with secure attachments to both parents and peers fared better overall. Armsden and Greenberg (1987) studied attachment of 86 undergraduate students aged 17-20 years. The study found that secure parent and peer attachments positively influenced students’ psychological well-being, and that parental attachment was the most significant criterion of the subjects’ overall happiness. Fass and Tubman (2002) also focused on both parent and peer attachment on 357 undergraduates aged 18 to 24. They found that parental and peer attachments are significantly associated with perceived competence, self-esteem, sex-role adherence, feelings of control, and optimism. Attachment was not found to be connected to academic functioning of students. Mattanah, Hancock, and Brand (2004) tied parental attachment to college adjustment for both males and females in their research on a sample of 404 college students from one institution. Students who displayed secure parental attachment and appropriate degrees of separation-individuation (defined as the lack of negative feelings toward separation) were more adjusted to college life. Both males and females in this study indicated that their attachment to their mothers more strongly influenced their feelings about separation than to their fathers. This is in line with Kenny and Perez’s (1996) finding that most college students identify their mother as the primary attachment figure in their lives. Finally, in
their review of the literature, Bluestein et al. (1995) found that secure parental attachment influenced identity formation, adjustment, and positive ego development in college students.

**PAQ studies.** The PAQ has been used in many different studies to assess the parental attachment of college students. Kenny (1987) found that attachment patterns are related to career planning patterns. She also found that attachment is correlated to positive relationship with self-assertion and dating competency. Several studies use the PAQ to focus on the influence of parental attachment on identity development. In research of young adults ages 22-29 and their mothers, Kenny and Sirin (2006) looked at the impact of parental attachment on the adult children’s self-worth, self-perception, and depression level. The sample was relatively small (81 pairs), highly educated, and from one geographic region, but featured diversity in ethnicity, income levels, and living arrangements. The research revealed that perceived parental attachment did have an impact on all three variables, with secure attachment correlating with high self-worth and self-perception and with low depression levels. Kenny and Sirin (2006) also discovered that parental attachment appeared to be more related to developing internal working models rather than serving as a base of support as children became adults. Similarly, McCarthy, Moller, and Fouladi (2001) found that parental attachment impacts the development of identity. In their study of 235 college juniors and seniors, they found parental attachment impacted the regulation and perception of stress, which in turn influenced emotional functioning and the development of internal working models. In a related manner, Young and Lichtenberg (1996) studied the influence of parental
attachment on identity development on a sample of 329 college seniors. They found students who were securely connected to their parents showed greater development in terms of identity exploration and commitment.

Thus, it appears college students’ secure parental attachment is related to general psychological well-being, greater self-satisfaction, identity development, increased ability to handle stress and likelihood of seeking social support (Armsden & Greenberg, 1987; Kenny & Sirin, 2006; McCarthy et al., 2001; Young & Lichtenberg, 1996). But what role does parental attachment play in moral development? It is tempting to infer that strides in any developmental realm are positive outcomes of secure development, but questions arise when considering the unique characteristics of Millennial generation students.

**Attachment & Diversity**

**Gender & class standing.** Kenny’s (1990) research supported the usefulness of attachment theory in understanding the strength of family ties in late adolescence. Her research revealed relatively few gender differences in men’s and women’s descriptions of their parental attachments. However, women reported a stronger perception of parents as a source of emotional support and seem to benefit in terms of confidence and assertion from secure parental attachment. Other research found that women scored significantly higher than men on two of the three scales of the PAQ (Kalsner & Pistole, 2003). Men who attend college further from home reported more positive feelings toward their parents and reported that parents were more supportive of their desire to be independent. Interestingly, Taub (1997) found that despite gains in autonomy from their first to the final year in college, women’s perception of parental attachment remained steady. This
indicates that the popular notion of breaking away from parental authority in order to achieve independence may not be relevant for young women. Lapsley, Rice, and Fitzgerald’s (1990) study of attachment and adjustment to college found that felt attachment to parents was not significantly different for first-year students than for upper-class students.

**Race & ethnicity.** Very few research projects have considered the issue of ethnicity or race on attachment. Hinderlie and Kenny (2002) tried to remedy this with a study of 186 Black college students ages 17 to 24. She found that this sample of Black students were indistinguishable from White students in previous studies in regards to parental attachment and college adjustment.

The idea of parental attachment can be controversial to mixed ethnic samples. Most studies on attachment ask students to report attachment to mother or father. However, Kenny and Perez (1996) found that 27% of non-white college students reported a family member other than a parent as their primary attachment figure. Various countries and cultures have different values and practices related to child care (Ainsworth, 1989). Differences in these values and practices lead to different attachment behaviors than those considered normal in the United States. This is a crucial point considering the number of Millennials who are immigrants or have immigrant parents. There are no firm conclusions about cultural differences with regard to attachment because there is no extensive multi-cultural data set (Blustein et al., 1995). As a result, Kalsner and Pistole (2003) used a modified PAQ which asks the respondent to report attachment behaviors as related to any primary caregiver.
Adults and Attachment

Adult attachment relationships are built on earlier experiences with attachment figures (Bowlby, 1977). They arise largely from working models of the attachment figure developed in childhood and significantly affect the adult’s ability to form new attachment relationships. By understanding how early attachment behaviors create working models one can begin to predict future behavior. The working models create a useful framework for guiding behavior as one interacts with the attachment figure and others. The working model also enables one to predict one’s own behavior as well as the social behavior of others (Kerns, 1994). Most importantly, working models pave the way for attachment throughout an individual’s lifetime.

Weiss (1982) outlined three characteristics that distinguish attachment in adults from attachment in children. First, peer attachment supersedes parent attachment for adults, although an individual’s working model developed from childhood attachment relationships mold future relationships. Next, while attachment relationships in infants impact their behavior in every setting, adults are able to compartmentalize their attachments with other adults. Thus, attachment behavior does not necessarily influence every action of the adult. Finally, most adult attachments contain a sexual relationship as adults’ primary attachment figure is a spouse or significant other. In this way, attachment maintains its biologically-based mechanism to ensure survival of the species.

As attachment in adolescents and young adults is studied, one must keep in mind that the function of attachment is to keep the individual safe and secure. Attachment relationships are particularly important in times of crises in one’s life. They also help
determine successful adaptation as adults (West & Sheldon-Keller, 1994). Bowlby (1988) stated that “the extent to which [each individual] becomes resilient to stressful life events is determined to a very significant degree by the pattern of attachment he or she develops during the early years” (p. 8). The working model of social relationships of adults is multi-faceted, having been established in childhood and molded by life experiences. The adult’s working model should allow “for appropriate social and emotional relationships and behaviors with a variety of people” (Mercer, 2006, p. 101).

**Summary**

Research has shown that parental attachment does continue to influence individuals throughout their lives. What pattern of parental attachment most accurately describes Millennial college students? Can we assume that they are securely attached based on their close connection with parents?

According to the literature, parental attachment is especially influential in the area of identity formation for adolescents and emotional responses in adults. According to some theorists, moral development is nurtured by the maturation of individual identity to include a sense of moral purpose (Colby & Damon, 1992). Will a secure attachment with parents lead to higher moral judgment competence for Millennial students?

Finally, there exists only minimal data regarding the differences in parental attachment based on gender, race and ethnicity of college students. Are there significant differences in these populations in terms of parental attachment? What about in terms of the influence of parental attachment on moral competency? The present study sought to
answer these questions and add to the understanding of Millennial generation college students and their unique characteristics.

Next, the tenets of moral development theory and the existing evidence of its interaction with parental attachment are outlined.

**Moral Development Theory**

Cognitive-structural theories are concerned with how individuals process and analyze information and perceive the world (Knefelkamp, Widick, & Parker, 1978). Moral development theories concentrate on mental processes and are classified as cognitive-structural models (Evans et al., 1998). Theorists have postulated that humans are born with the capacity to filter information based on a series of assumptions about their environment (Knefelkamp et al., 1978). As individuals develop, these assumptions allow for greater complexity in considering responses to various circumstances. Cognitive-structural theories by nature are systematic, allowing for a normal succession through increasingly complex mental stages with no set timeframe for progression.

Moral development occurs as a result of cognitive dissonance and a resulting equilibrium (Wadsworth, 1979). Typically, humans adapt to their environment by either assimilating or accommodating new information. Individuals first attempt to assimilate new information by absorbing it into their current thought patterns. If this does not work, they accommodate information by adapting their thought patterns. This process causes cognitive dissonance that is only resolved when the individual has come to terms with the accommodation and development occurs (Wadsworth, 1979).
In the past century, three theorists have made noteworthy inroads in describing the cognitive-structural nature of moral development: Jean Piaget, Lawrence Kohlberg, and Carol Gilligan (Rich & DeVitis, 1994). Other theorists such as the Neo-Kohlbergians (Rest, 1979b) and Georg Lind (1985a) built their work on the foundation of Kohlberg and Piaget while attempting to address the deficiencies in their theories as evidenced by Gilligan. Finally, Robert Kegan (1982) proposed a theory of social maturity.

Jean Piaget: Cognitive Development Theory

Jean Piaget is considered the founder of modern moral development theory. His research on the cognitive development of children is the basis on which contemporary morality theorists have built their arguments (Murray, 2007). Piaget identified four periods of intellectual development exhibited by children: (a) sensory motor period (0-24 months); (b) pre-operational period (2-7 years); (c) period of concrete operations (7-11 years); and (d) period of formal operations (11-15 years). Within this framework, he identified two phases of moral development: (a) heteronymous morality or moral realism during the pre-operational period, and (b) autonomous morality or morality of equity and cooperation during the period of concrete operations or the period of formal operations (Piaget, 1947/1950).

Piaget devised his theory by observing a small sample of boys aged 5 to 13 playing marbles and their responses to stories of moral dilemmas (Rich & DeVitis, 1994). In Stage 1, children base decisions on absolute deference to the wishes and demands of persons in authority. Thought processes are egocentric, centering on the concepts of fairness and justice for self but not others. Stage 2 thinking occurs later in childhood and
symbolizes the ability of the individual to consider and understand the viewpoint of others. They realize that their decisions impact others and strive for group equity and cooperation. Piaget believed that all children inevitably move from egocentrism to egalitarianism through interaction with peers.

Weaknesses abound in Piaget’s theory (Rich & DeVitis, 1994). First, his sample was of white boys from middle-class backgrounds. Findings cannot be generalized to the population at large. Next, Piaget maintained that advancing from Stage 1 to Stage 2 is automatic, but other research has shown that progression is not necessarily linear (Lickona, 1976; Rosen, 1980). In Piaget’s study, children may appear to have progressed to the higher stage while playing, but they may still approach real life in egocentric terms. Finally, researchers have proven that children may not be as totally self-centered as Piaget assumed (Donaldson, 1978; Maratsos, 1973; Thompson, 2006). Despite these criticisms, Piaget’s research has inspired and shaped modern understanding of moral development.

**Lawrence Kohlberg: Moral Reasoning & Development Theory**

Lawrence Kohlberg has a dichotomous reputation as “an ‘odd duck’ within American psychology” (Brown & Herrnstein, 1975, p. 307) to being responsible for “almost single-handedly innovat[ing] the field of cognitive moral development” (Gibbs, 2003, p. 57). In 1958, Kohlberg completed his doctoral thesis on the moral reasoning of adolescent boys. Drawing from Piaget’s earlier work on the moral development of children, Kohlberg found that children proceeded through the two stages identified by Piaget as well as four additional stages (Kohlberg, 1959). This initial research was the
basis for his life work of refining the stages of moral development, validating his theory, and offering suggestions for use of the theory in educational settings (Evans et al., 1998). Ultimately, Kohlberg’s work changed the way social scientists viewed morality (Gibbs, 2003). Instead of morality existing relative to a culture, people from all backgrounds progress through advanced stages of moral development in a discernable sequence. Thus, Kohlberg remains the foremost expert on moral development and one of the most cited psychologists in the field (Haggbloom et al., 2002).

According to Kohlberg (1972), moral reasoning centers on the concept of justice. Moral development is the process whereby an individual’s assumption of what is right or just changes over time (Kohlberg, 1976). Kohlberg maintained that there were two prerequisites for moral development to occur: (a) cognitive structures defined by Piaget (1947/1950) must be present; and (b) individual must have the ability to view the world from another’s perspective and identify with their thoughts and feelings (Kohlberg, 1976). Moral development occurs in progression through three levels each consisting of two stages. Each level represents the way a person relates to the external world during that period of individual development.

Level I is called Preconventional, and it refers to a state where the individual lacks awareness of or concern with the rules of society (Kohlberg, 1976). The level consists of two stages: (a) Heteronomous Morality and (b) Individualistic, Instrumental Purpose, and Exchange. In Stage 1, behavior is based on obeying rules to evade punishment. Individuals in this stage wish to avoid harm to themselves and others and have a fearful respect for authority. Stage 2 behavior is based on obeying rules for
personal reward. Individuals in this stage are hedonistic but not sadistic; they focus on balancing their own desires with the threat of punishment to maximize their own pleasure. They do recognize the rights of others, but they strive to exploit their personal advantage through their own tainted lens of justice. These stages are typified by the thought process of young children (Rich & DeVitis, 1994).

Level II is called Conventional where individuals develop an awareness and respect for societal rules (Kohlberg, 1976). Level II consists of Stages 3 (Mutual Interpersonal Expectations, Relations, and Interpersonal Conformity) and 4 (Social System and Conscience). Stage 3 behavior is based on a motivation to be seen as a “good” person by others. People in this stage are generally agreeable and strive to achieve the expectations of others. They have not, however, gained the realization that more than just the people involved in an interaction might be impacted by their actions. Stage 4 behavior is based on law and order. People in this stage are conformists, believing that all policies and procedures are valid in all situations and for all people. They exhibit an unquestioning respect for the social system and strive to fulfill their individual duties. Most adults function at Stages 3 and 4 (Rich & DeVitis, 1994).

In later research, Kohlberg (1984) expanded the Conventional Level to make a distinction of what he called Type A and Type B moral reasoning. Type A individuals use judgment based on conventional personal or societal ideas while Type B individuals rely on more universalized principles. Thus a person can be at Stage 3/Type A, Stage 3/Type B, Stage 4/Type A, or Stage 4/Type B based on their thought processes.
Gibbs, Basinger, & Fuller (1992) maintain that the moral development for most people ends at Level 4/Type B instead of proceeding on to Kohlberg’s Level III.

Level III is the Post-Conventional or Principled echelon where an individual’s own value system supersedes the rules of society (Kohlberg, 1976). Stages 5 (Social Contract or Utility and Individual Rights) and 6 (Universal Ethical Principles) are a part of Level III and complete the theory framework. Stage 5 behavior is based on an agreed-upon social contract that people enter into willingly and with conviction. Individuals in this stage exhibit the ability to evaluate social rules and laws and are willing to work for improvements they deem necessary. Stage 6 behavior is based upon individual conscience and abstract principles. Theoretically, individuals in this stage have the capacity to consider all of the ramifications of any action in a situation. They exhibit selflessness and focus on universally recognized principles during decision making. Only 20-25% of individuals progress to Stage 5, and only 5-10% are thought to reach Stage 6 (Rich & DeVitis, 1994). Kohlberg admitted that none of his longitudinal studies had demonstrated a subject exhibiting the full characteristics of Stage 6, but he felt that the stage was still important as a theoretical capstone and used examples such as Gandhi and Martin Luther King, Jr. to support its existence (Kohlberg, Levine, & Hewer, 1984).

Kohlberg devised a series of hypothetical situations to test his theory using a highly structured interview procedure called the Moral Judgment Interview (Conroy & Burton, 1980). These situations involved fictional people being forced to decide whether to break societal rules in order to bring about what could be considered the greatest good. For example, one of Kohlberg’s situations involved a poor man whose wife was dying
and could be cured with a specific medication. The pharmacist who created and sold the medication would not give it to him for the price the man could afford, so the man is forced to make a decision about stealing the medication. In Kohlberg’s interviews, participants are asked what the man should do, why they choose that route, and the thought processes they go through to make the decision.

Despite his stature as one of the most eminent moral development theorists, Kohlberg has been subject to criticism. The use of hypothetical situations has been disparaged for measuring abstract rather than concrete reasoning (Conroy & Burton, 1980). When presented with a specific scenario, most people have a tendency to fall back on their immediate experiences as a reference point in decision-making. When they lack direct experience, people usually default to commonly held societal rules and expectations (falling into Stages 1 or 2 in Kohlberg’s theory). However, when they have personal experience in a matter, they are able to make a moral judgment based on higher level thinking (Stages 3 or 4).

Like Piaget, Kohlberg was criticized for his focus on erudite, privileged, white male subjects and the influence of his Westernized value system (Conroy & Burton, 1980). His theory was said to devalue gender and class differences and to neglect the importance of communitarian morality in favor of justice. This has the result of marginalizing not only people from non-Western cultures, but also those from working class or rural backgrounds who may place the common good higher than individual autonomy. Those who approach morality from a communitarian standpoint are destined
to top out at Stages 3 or 4 in Kohlberg’s theory, while those with justice morality may reach Stages 5 or 6.

**Carol Gilligan: Moral Development in Males & Females**

Carol Gilligan began her work after she found that Kohlberg’s theory was inadequate when viewing the moral logic and behavior of women in real-life dilemmas (Gilligan, 1982). She determined that women emphasize effect of decisions on their connection with others (care) while men stress the effect on themselves (justice). Gilligan termed this phenomenon “voice” and recognized that men and women use both voices. However, certain people prefer one voice to the other, and women tend to use the care voice while men favor the justice voice. Research has also suggested that many minority groups emphasize the voice of care over justice (Evans et al., 1998).

Gilligan’s theory suggested that men favor a justice orientation in moral development while women emphasize a care orientation (Gilligan, 1982). Men tend to see situations in an abstract way, whereas women view circumstances personally. Figure 1 outlines the differences in moral development of men and women.

Not all men and women fall neatly into the appropriate category. Gilligan emphasized that all people use both voices, but that they are more likely to choose one over the other (Gilligan, 1982). For example, Lyons (1983) found that all people who expressed the importance of relationships tended to use the care ethic while those who emphasized rules used the justice ethic, regardless of gender. Ethnic background can impact an individual’s preference, as many minority groups stress the importance of family and relationships.
<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethic of Justice</td>
<td>Ethic of caring</td>
</tr>
<tr>
<td>Independence</td>
<td>Interdependence</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Logic</td>
<td>Feelings</td>
</tr>
<tr>
<td>Sympathetic</td>
<td>Empathetic</td>
</tr>
<tr>
<td>Step back from situations</td>
<td>Enters into situations</td>
</tr>
<tr>
<td>Emphasizes fair rules</td>
<td>Emphasizes connections and feelings</td>
</tr>
<tr>
<td>Define self in terms of profession</td>
<td>Defines self in terms of relationships</td>
</tr>
<tr>
<td>Maturity develops autonomy</td>
<td>Diligence develops autonomy</td>
</tr>
<tr>
<td>Job is separate from home and family</td>
<td>Marriage, family, and job are linked</td>
</tr>
<tr>
<td>Success results from own abilities</td>
<td>Success results from luck and diligence</td>
</tr>
<tr>
<td>Decisions based on impersonal principles</td>
<td>Decisions based on relationships</td>
</tr>
</tbody>
</table>

Sources: Canon, 1989; Fried, 1989; Jacoby, 1991; Rodgers, 1989

Figure 1. Differences in moral development in males and females.

Gilligan’s theory has been subject to criticism and refuted by empirical evidence (Brabeck, 1989; Brabeck & Kenny, 1994; Thoma, 1986; Walker, 1984; Walker, DeVries & Trevethan, 1987). These researchers found evidence that moral reasoning of males and females follow similar patterns. However, Gilligan’s emphasis on gender differences was confirmed by other researchers who found that women tend to respond more empathetically and with greater ethical sensitivity than men (Bebeau & Brabeck, 1987). Rest (1983) defined ethical sensitivity as the ability to identify the significance of issues, take on the perspective of others, and react with the appropriate emotional responses. Gilligan’s work has served as a catalyst for a revision of Kohlberg’s theory to address gender and ethnic inequities.
The Neo-Kohlbergians: Moral Reasoning Theory

James Rest, a student under Kohlberg, led a group of researchers to revise Kohlberg’s theory in response to criticism and to create an instrument to quantitatively measure moral development, the Defining Issues Test (Rest, 1979b). After a thorough review of moral development literature, these neo-Kohlbergians (Walker, 2002) determined that moral behavior consists of four parts: (a) moral reasoning, the cognitive process of judgment; (b) moral sensitivity, the emotional process of empathy; (c) moral motivation, the psychological process of selflessness; and (d) moral action or courage, the physical process of perseverance (Rest, 1986). Of these components, moral reasoning was thought to drive moral behavior and is the foundation of Kohlberg’s theory of moral development (Blasi, 1980; Kohlberg, 1984; Rest, 1986).

The neo-Kohlbergians revised Kohlberg’s theory with a concentration on moral action and sensitivity (Rest, 1979a). In neo-Kohlbergian view, stages are replaced by schemas, defined as “general cognitive structures in that they provide a skeletal conception that is exemplified (or instantiated) by particular cases or experiences” (Rest, Narvaez, Bebeau, & Thoma, 1999, p. 136). Schemas are (a) personal interest, replacing Kohlberg’s stages 2 and 3; (b) maintaining norms, Kohlberg’s stage 4; and (c) post-conventional, Kohlberg’s stage 5 and 6 (Rest 1979a, pp. 22-23). The neo-Kohlbergians also advocated a more fluid approach to moral development, claiming that the people can exhibit judgment in more than one stage at the same time. An individual’s thought pattern cannot be considered to reflect only one particular stage. Instead, neo-Kohlbergians suggested that various percentages of mental processes exist in
different stages. This is most prevalent in the post-conventional level. This concept helped expand Kohlberg’s theoretical Stage 6 into an actual state of being.

The neo-Kohlbergian’s principal contribution to the field was the Defining Issues Test (DIT) to measure moral reasoning. The DIT was developed to overcome the frustration of researchers with Kohlberg’s Moral Judgment Interview and its subjective scoring method (Rest, 1979b). Since its genesis in 1974, the DIT has been used in hundreds of studies, and “is the most widely used measure of moral judgment development” (Thoma, 2002, p. 225).

**Georg Lind: Dual-Aspect Theory of Moral Behavior & Development**

In the 1970s, Georg Lind developed a new concept and measurement of morality, focusing on moral judgment competence (Lind, 2008). Building on Kohlberg’s (1959; 1964; 1984) definition of moral judgment competence and criteria for a successful measurement, Lind created the Dual-Aspect Theory of Moral Behavior and Development. Kohlberg defined moral judgment competence as “the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments” (Kohlberg, 1964, p. 425; Kohlberg, 1984, p. 523). This innovative concept made it clear that the moral person must not only understand what is moral, he or she must also have the ability to actually act upon it. Moral judgment competence also defines morality in the context of a person’s internal feelings of what is acceptable, not only the recognition of social norms and values. Thus, the concept of moral judgment competence brings together the affective, cognitive, and behavioral aspects of morality into one component to be measured as a whole.
Using Kohlberg’s definitions and suggestions for measuring moral judgment competence, Lind (1982, 1985a, 1985b, 2000, 2008) developed the Moral Judgment Test (MJT) with which to measure the theory of moral judgment competence development. Lind (2008) defined eight hypotheses in regard to the measurement of moral judgment competence: (a) Inseparability: while affective and cognitive aspects of morality are distinct, they are inseparable and must both be measured; (b) Moral task: a moral task that requires an individual to take a stance on an issue and rate agreements for and arguments against their stance must be present in the measurement; (c) Non-fakeability: individuals must not be able to increase their own competence scores without a genuine increase in moral judgment; (d) Sensitivity to change: the measurement should be sensitive to changes in one’s moral development; (e) Internal moral principles: the measurement should not impose external moral beliefs on the individual; (f) Quasi-simplex: the dilemmas presented must support the idea of an ordered sequence in moral development; (g) Parallelism: the dimensions of affective and cognitive morality should correlate with each other; and (h) Equivalence of pro- and con-arguments: the arguments to test a subject’s position must be reasonable and justifiable.

The MJT was developed with these eight hypotheses in mind. The instrument allows the researcher “to assess the ability of people to judge arguments pro and contra a controversial moral problem on the basis of their own moral principles, that is, irrespective of their opinion on a particular problem” (Lind, 2008, p. 195). Like many other instruments measuring moral development, it also assesses subjects’ attitudes
towards the six stages of Kohlberg’s theory. According to Lind (2008), the MJT is meant to answer the following question,

Do the participants base their ratings on the different moral qualities of the arguments and thus demonstrate some moral judgment competence, or do they base their judgment rather on the fact whether the argument speaks in favor or against their own opinion on how to solve the dilemma? (p. 196).

The strength of using the MJT to study moral judgment competence is the ability to empirically test hypothesis about the connection between moral development and social behavior (Lind, 2008). Unlike other tests designed to measure moral judgment, the MJT places emphasis on moral tasks rather than just moral attitudes and allows the subject less ability to fake their scores upward. “There seems to be no test, besides the MJT, which contains a difficult moral task and thus measures moral judgment competence in a theoretically valid way” (Lind, 2008, p. 211).

Robert Kegan: Social Maturity Theory

In 1982, Harvard psychologist Robert Kegan proposed a new theory of moral development called social maturation (Dombeck, 2009). It consists of six stages: (a) Incorporative, where a sense of self is not yet developed; (b) Impulsive, where individuals’ own needs are felt and understood, but awareness that others have needs is not; (c) Interpersonal, where individuals understand both their own needs and others’ needs; (d) Institutional, where an individual begins to embrace guiding principles and can put others’ needs above their own; and (e) InterIndividual, where individuals can view respect and understand society values, their own values, and counter-cultural values. Kegan maintains that most adults cease development at the Institutional stage and that most college students will fall in the Interpersonal and Institutional categories.
Moral Development in College Students

According to Evans et al., “the college environment serves as an excellent laboratory for moral development” (1998, p. 172). King and Mayhew (2002) speculate that moral development is particularly intriguing during the college years for three reasons: (a) enrollment in college is a life transition wrought with value implications; (b) higher education has a value-driven mission; and (c) college students are the future leaders of business and society where they will impact the lives of others. As a result, moral development of college students has been the focus of a vast number of research studies. In a review of 172 studies, King and Mayhew (2002) only found two that did not positively correlate moral development with higher education.

Cognitive development is important throughout the life cycle, but it is crucial during the college years. Piaget (1952) suggested that moral development can only occur when maturation and circumstances are ripe for the change. Rest (1979a) believed that higher education encourages movement from conventional to post-conventional levels in Kohlberg’s theoretical framework. While Rest (1986) did not specify that higher education acts as a conduit for moral development, he did find that individuals with typical college student characteristics such as the desire to learn, take risks, and engage in stimulating environments are more likely to reach higher levels of development (Rest, 1988). Most traditional-aged college students have reached the required state of maturation for development, and higher education administrators have the responsibility to provide an environment of support and challenge to create opportunities for cognitive dissonance and equilibrium to occur (Evans et al., 1998).
**Moral Development & Diversity**

*Race & ethnicity.* King and Mayhew (2002) found only two studies out of 172 specifically intended to study the difference in moral development by college student ethnicity. Only three studies included race or ethnicity as an auxiliary research question. Thus, “research investigating the relationship between race and ethnicity and moral judgment . . . is underdeveloped, and no clear pattern of results is yet available” (King & Mayhew, 2002, p. 251). More studies on diverse populations are needed.

*Gender.* According to most research, men and woman demonstrated the same level of moral development (Pearson & Bruess, 2001). Research has shown that women tend to show a greater ethic of care as suggested by Gilligan (1982) when faced with real life as opposed to hypothetical moral dilemmas (Seifert & Hoffnung, 1994). In actual moral situations, women are concerned with the context and how those impacted feel about the moral decisions they make. However, when faced with hypothetical situations like those used in most instruments measuring moral development, both women and men typically fall back on the concepts of justice and equality when making decisions. Thus, there should be no statistically significant differences between males and females when using an instrument with hypothetical situations (Seifert & Hoffnung, 1994).

**Moral Development in Millennials**

Based on his work with Millennial generation patients, psychologist Dave Verhaagen (2005) identified three emotional protective factors that help adolescents manage the inherent risk factors associated with growing up. One of these emotional protective factors is the ability to feel bad after doing something wrong. Verhaagen
related this ability directly to Kohlberg’s theory of moral development and suggested that parents be familiar with the stages of this theory in order to help their children experience advancement in moral reasoning. Thus, it appears that this expert believed that Kohlberg’s work is directly related to the way Millennials develop morally. But are these students developing at the same rate as their counterparts from previous generations? Is parental involvement and attachment related to this development as Verhaagen implies?

Mackay (1997) said that the Millennial generation has been reared “without having had a moral framework clearly espoused and unambiguously articulated by their parents” (p. 145), but that parents are an important source of determining their views of what is right and wrong. He said the knowledge of moral absolutes are unknown to this generation and that they are unconcerned about this. If this is true and Millennials are unencumbered by pre-conceived notions and the allure of law and order, this generation may have more potential than any other to truly embody Kohlberg’s post-conventional level 6. However, many Millennials seem to be searching for meaning in their lives (Huntley, 2006). They seek the spiritual through traditional and non-traditional religions as well as activities that have spiritual dimensions such as yoga, astrology, and meditation. Huntley (2006) reported that market researchers have called Millennials “Generation Paradox” (p. 167) due to their focus on both material comforts and spiritual matters. Millennials are unconcerned that their spiritual focus is perceived as contradictory because they are concerned with finding “more effective ways to work out the big questions in life” (Huntley, 2006, pp. 167-168). These characteristics indicate that
Millennials are still searching for answers and that their moral judgment competence could be far from Kohlberg’s post-conventional levels.

**Summary**

While the university environment has an important impact on the moral development of college students, parental influence is still important (Rich & DeVitis, 1994). In the 1950s, Jacob reviewed hundreds of research studies conducted since the 1920s, visited 30 campuses, and collected information on curriculum from universities nationwide to assess the impact of American higher education on student values (Jacob, 1957). His conclusion was that “the values which [college students] arrive and which are integral elements of their personality are still there when most students leave” (p. 53). While a host of research has refuted this observation over the past 50 years, it cannot be denied that “college may be the last important opportunity for a self-confronting experience” (Rich & DeVitis, 1994, p. 84). In fact, much evidence for moral development growth in college students has been generated through hundreds of research studies on thousands of diverse samples (King & Mayhew, 2002). With questions arising about Millennial students’ ability to progress through the stages predicted by moral development models due to parental influence in their lives (Strange, 2004), it is crucial for higher education administrators to better understand the connection between parental attachment and moral development.

**Parental Attachment & Moral Development**

While many publications in the popular press address the characteristics of Millennial generation students and their hovering parents, few have focused on the
attachment between parents and college students and the resulting impact on student’s moral development. Attachment and moral development have been studied extensively as separate topics, but very little research has considered the association between the two topics (Van Ijzendoorn & Zwart-Woudstra, 1995). Researchers and theorists generally agreed that children need parents to develop moral judgment (Ansbacher & Ansbacher, 1964; Boyes & Allen, 1993; Haan, Langer, & Kohlberg, 1976; Hoffman & Saltzstein, 1967; Parikh, 1980; Powers, 1988; Rogers, 1994; Stilwell, Galvin, Kopta, Padgett, & Holt, 1997; Thompson, 2006; Van Ijzendoorn & Zwart-Woudstra, 1995; Walker & Henning, 1999; Walker & Taylor, 1991). Kohlberg (1969) postulated that children must develop the ability to reason and engage in role-taking to develop morally, and parents provide these opportunities. He did not emphasize parental influence on moral development, however, allowing for increased influence by peers and involvement in society. Other theorists and researchers rated the impact of parents more highly (see Ansbacher & Ansbacher, 1964; Boyes & Allen, 1993; Haan et al., 1976; Hoffman & Saltzstein, 1967; Parikh, 1980; Powers, 1988; Rogers, 1994; Stilwell et al., 1997; Thompson, 2006; Van Ijzendoorn & Zwart-Woudstra, 1995; Walker & Henning, 1999; Walker & Taylor, 1991).

Stilwell et al. (1997) developed a model of conscience functioning that ties attachment to moral development in children. The model consists of five domains: (a) conceptualization; (b) moral-emotional responsiveness; (c) moral valuation; (d) moralization of attachment; and (e) moral volition. The conceptualization domain is considered the framework upon which the others can build. The model consists of five
stages personified by individuals ages 5 to 17: (a) children (ages 5-7) are in the External Conscience stage and show compliance to authority; (b) children (ages 7-11) are in the Brain or Heart stage and are rule-oriented and find satisfaction in following regulations; (c) children (ages 11-13) are in the Personified or Heart-Mind stage where they incorporate rules with feelings; (d) adolescents (ages 13-15) are in the Confused Conscience stage where they challenge authority and struggle to interpret different signals from many sources; and (e) adolescents (15-17) finally reach the Integrated Conscience stage where they realize that absolutes do not exist and the importance of their own thought processes in decision-making.

The other domains identified by Stilwell et al. (1997) are interspersed throughout the stages categorized in the conceptualization domain. The second domain, moral-emotional responsiveness, is the emotional response to behavior. Individuals strive to maintain positive feelings, and the moral-emotional responsiveness domain illustrates how this is achieved throughout all of the stages identified by Stilwell et al. (1997). The third domain, moral valuation, describes the evaluation process individuals to weigh rules and principles in response to a moral issue. The fifth domain is moral volition, the act of evaluating both internal and external principles and deliberately choosing the interests of society over self.

Most relevant to this discussion is the fourth domain, moralization of attachment. This domain concentrates on how interactions and relationships with others impact moral growth (Stilwell et al., 1997). Developed from attachment theory (e.g., Bowlby, 1982) and developmental stages of empathy (e.g., Hoffman, 1991), moralization of attachment
occurs “when a child learns that he or she can positively change the parent’s expressed feelings and enhance his or her own feelings of security by heeding parental demands and prohibitions” (Stilwell et al., 1997, p. 1143). In their study of 132 children and adolescents between the ages of 5 and 17, Stilwell et al. (1997) found evidence that this construct existed within the model of conscience functioning. Specifically, they found that children in the External Conscience Stage not only comply with authority to avoid punishment as posited by Kohlberg (1969), they also seek to please parents. In the Brain or Heart stage, children are capable of using select moral responses garnered from an ever-expanding repertoire based on interactions with others. Children in the Personified or Heart-Mind stage begin to acquire the ability to take the perspective of others. They begin to understand that parents want what is best for them and sometimes have to do things they do not like for the child’s own good. During the Confused Conscience stage, adolescents begin the well-known rebellion period where they question everything, but are still submissive and fiercely loyal. Finally, adolescents reach the Integrated Conscience stage where their relationship with parents is generally positive and respectful although the child is aware that their parents demonstrate weaknesses and faulty logic at times. Interestingly, at the time of this research, the oldest children (ages 12-17) studied were members of Generation X and the younger children (ages 5-11) were part of the Millennial generation. This research does not address generational differences, but could generational status have an impact on how the younger children eventually experience moralization of attachment?
Thus, moral development begins with a child’s first interactions with his parents (Hirschi, 1969). As the child grows to trust and respect his father and mother, he emulates their behavior and defers to their rules. This emotional connection allows the child to test limits within a secure environment, allowing the transference of parental values and expectations. When a child reaches adolescence, peers begin to exhibit a greater influence on moral development (Panella, Cooper & Henggeler, 1982), but parents remain the primary authority on morality in the child’s life (Steinberg & Morris, 2001; Stilwell et al., 1997).

Most research on the relationship between attachment history and moral development in young adults has focused on members of Generation X. In his doctoral dissertation, Rogers (1994) was the first to examine this relationship. A small sample of White, 17-20 year old freshmen and sophomores completed the Attachment History Questionnaire (AHQ) and the Defining Issues Test (DIT). The research revealed no significant influence of parental attachment history on moral development, but Rogers acknowledged problems such as the small, homogenous sample in the study methodology that could have contributed to this finding.

Van Ijzendoorn and Zwart-Woudstra (1995) conducted a research study of 47 college students aged 18 to 22 years. Using the Adult Attachment Interview, the researchers classified the group into three types: (a) autonomous (secure); (b) dismissing (anxious-avoidant); and (c) preoccupied (anxious-resistant). The Sociomoral Reflection Measure-Short Form was used to determine the stage of moral development based on Kohlberg’s theory, including the addition of Type A and B to the Conventional Level.
Results showed that overall parental attachment made no difference in the overall moral development score, but that Type A and B moral reasoning was impacted by attachment style. Type B reasoning was related to autonomous (secure) attachment. Kohlberg (1984) depicted Type B individuals with the ability to balance individual and societal demands. This research seems to indicate that individuals with secure attachments are more likely to reach higher levels of Kohlberg’s Conventional reasoning.

**Summary**

The existing literature is inconclusive regarding the impact of parental attachment on college students’ moral development and has not focused specifically on the Millennial generation. Higher education administrators face complex questions regarding this generation and the impact of helicopter parents on college student development, the moral and ethical behavior of Millennials, and the increased pressure of living in a society that has suffered war, terrorism, and tragedy.

This research project sought to increase understanding on the correlation of parental attachment behavior influences and the moral judgment competence of Millennial college students in order to assist higher education administrators in developing programs that increase the moral development of students and informing parents of how their behavior may influence a student’s moral judgment competence, as well as provide a foundation for future research on this topic.
Chapter 3
Methodology

The literature supported the idea that parents influence the moral development of their children, but there is a dearth of information about the influence of current parental attachment on Millennial generation college students’ moral judgment competence. The purpose of this quantitative study was to examine the correlation between parental attachment and moral judgment competence of college students in the context of their Millennial generation characteristics in order to assist higher education administrators in developing programs that increase the moral development of students and informing parents of how their behavior may influence a student’s moral judgment competence.

The research questions and hypotheses were:

R1: Was there a correlation between students’ perceived parental attachment and their overall percentage of demonstrated moral judgment competence?

H1a: There was no correlation between the total score on the Parental Attachment Questionnaire (PAQ) and the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT).

H1b: There was no correlation between the PAQ Affective Quality of Attachment subscale and the percentage of demonstrated moral judgment competence (C score).

H1c: There was no correlation between the PAQ Parental Fostering of Autonomy subscale and the percentage of demonstrated moral judgment competence (C score).
H1d: There was no correlation between the PAQ Parental Role in Providing Support subscale and the percentage of demonstrated moral judgment competence (C score).

R2: What was the students’ demonstrated moral judgment competence, and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

H2a: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between males and females.

H2b: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between Caucasians and non-Caucasians.

H2c: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students with different class standings.

H2d: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students in different age groups.

R3: What were the students’ overall scores and the scores on the subscales of the Parental Attachment Questionnaire (PAQ), and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?
H3a: There was no difference between males and females on the total Parental Attachment Questionnaire (PAQ) score.

H3b: There was no difference between males and females on the PAQ Affective Quality of Attachment subscale.

H3c: There was no difference between males and females on the PAQ Parental Fostering of Autonomy subscale.

H3d: There was no difference between males and females on the PAQ Parental Role in Providing Emotional Support subscale.

H3e: There was no difference between Caucasians and non-Caucasians on the total Parental Attachment Questionnaire (PAQ) score.

H3f: There was no difference between Caucasians and non-Caucasians on the PAQ Affective Quality of Attachment subscale.

H3g: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Fostering of Autonomy subscale.

H3h: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Role in Providing Emotional Support subscale.

H3i: There was no difference between college students by class standing on the total Parental Attachment Questionnaire (PAQ) score.

H3j: There was no difference between college students by class standing on the PAQ Affective Quality of Attachment subscale.

H3k: There was no difference between college students by class standing on the PAQ Parental Fostering of Autonomy subscale.
H3l: There was no difference between college students by class standing on the PAQ Parental Role in Providing Emotional Support subscale.

H3m: There was no difference between college students by age group on the total Parental Attachment Questionnaire (PAQ) score.

H3n: There was no difference between college students by age group on the PAQ Affective Quality of Attachment subscale.

H3o: There was no difference between college students by age group on the PAQ Parental Fostering of Autonomy subscale.

H3p: There was no difference between college students by age group on the PAQ Parental Role in Providing Emotional Support subscale.

R4: Were there differences in the correlation between students’ overall percentage of demonstrated moral judgment competence and perceived parental attachment between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

H4a: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for males and for females.

H4b: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for Caucasians and for non-Caucasians.

H4c: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for students of different class standings.
H4d: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for students in different age groups.

Design of Study

A quantitative research design was chosen to address these research questions. Quantitative research is systematic, objective, deductive, and may be generalized to larger populations (Frankel & Wallen, 1996). For the purpose of this study, findings are descriptive rather than experimental as no attempt was made to change behavior or conditions. The study used a cross-sectional approach, where subjects’ characteristics were only studied once before relationships were determined. This research design was chosen to explore the merit of the topic before a more difficult and time-consuming longitudinal or qualitative study was embarked upon.

Population/Sample

The population studied included 6,091 students enrolled in two regional campuses of a university located in the northeastern United States. The researcher received 1272 usable responses; a response rate of 20.88%. One campus was a commuter campus located in an urban setting and the other was primarily a residential campus with a high number of students from rural areas and small towns. One campus had a Carnegie classification as Baccalaureate-Arts & Sciences and the other was classified as Baccalaureate-Diverse Fields. Both universities were public institutions. All subjects were undergraduate students between the ages of 18-25 at the time of data collection. The specified age range ensured that each student was a member of the Millennial generation. Demographic
characteristics for the population surveyed obtained from an Open Records request are shown in Table 1. Demographic characteristics such as ethnicity, enrollment status, and

Table 1

Demographic Characteristics of Population

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>2497</td>
<td>41</td>
</tr>
<tr>
<td>Male</td>
<td>3594</td>
<td>59</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>2671</td>
<td>44</td>
</tr>
<tr>
<td>20-21</td>
<td>2175</td>
<td>36</td>
</tr>
<tr>
<td>22-23</td>
<td>956</td>
<td>16</td>
</tr>
<tr>
<td>24-25</td>
<td>289</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2

Demographic Characteristics of Surveyed Campuses (all undergraduate students)

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>5416</td>
<td>73</td>
</tr>
<tr>
<td>Non-Caucasian</td>
<td>1329</td>
<td>18</td>
</tr>
<tr>
<td>Not reported</td>
<td>637</td>
<td>9</td>
</tr>
<tr>
<td>Enrollment Status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time</td>
<td>1003</td>
<td>14</td>
</tr>
<tr>
<td>Full-time</td>
<td>6379</td>
<td>86</td>
</tr>
</tbody>
</table>
class standing were not available from the institutions. Data shown in Table 2 are for the entire undergraduate population, including those over the age of 25, and were culled from the institutions’ common data sets.

In an attempt to increase the response rate, five contacts and specific methods of survey implementation were used as recommended by Dillman (2000) and adapted for on-line delivery. Five contacts were made by e-mail to those selected for the study: a pre-notice e-mail, the survey e-mail, a post-survey reminder/thank you, another reminder to those who had not completed the survey and a final reminder to non-responders. Additionally, respondents were eligible for a drawing for one of five $100 gift cards.

Variables

One of the independent variables studied was parental attachment. Parental attachment is the emotional bond experience with another who is sensed as a source of security and who provides a secure base for anchoring exploration (Bowlby, 1988). Parental attachment was measured with three scales, (a) Affective Quality; (b) Fostering of Autonomy; and (c) Emotional Support (Kenny, 1985). The researcher chose to concentrate on parental attachment instead of peer attachment due to the fact that the Millennial generation indicated that they are closer to their parents than any previous generation (Wills, 2005) and many report that they would prefer spending time with family than with friends (Verhaagen, 2005). Data released from the National Survey for Student Engagement (2007) confirms these trends. Although friends are still important to Millennials (Howe & Strauss, 2003), the researcher was specifically interested in how parents continue to influence their children into their college years.
Other independent variables included gender (male or female); ethnicity (Caucasian or non-Caucasian); class standing (freshman, sophomore, junior, or senior), and age (18-19, 20-21, 22-23, or 24-25).

The dependent or criterion variable was moral judgment competency. Moral judgment competency is “the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments” (Kohlberg, 1964, p. 425). Moral judgment competency was measured with a percentage indicating “the degree to which individuals accept or reject arguments in a discussion on a moral issue in regard to their moral quality rather than in regard to their agreement with his or her opinion or other non-moral properties” (Lind, 2008, p. 200).

**Instrumentation**

Three instruments (Appendix C) were used in addition to a short demographic questionnaire: (a) Parental Attachment Questionnaire or PAQ (see pages 183-187), (b) Moral Judgment Test or MJT (see pages 178-181), and (c) Spiritual Experience Index – Revised or SEI-R (see pages 181-183). The SEI-R was not used in this study but was used in Madigan’s study on parental attachment and spiritual development.

**Parental attachment questionnaire.** The Parental Attachment Questionnaire (PAQ) was designed to assess perceived parental availability, understanding, acceptance, respect for autonomy, interest in interaction with parents and affect toward parents during visits, student help-seeking behavior in situations of stress, and satisfaction with help obtained from parents (Kenny, 1994). The PAQ was chosen for this study because it only measures the extent of parental attachment rather than both parental and peer attachment.
Some researchers have used the IPPA to measure only parental attachment, eliminating the peer scale (i.e., Mattanah et al., 2004). However, in selecting the PAQ, the researcher was able to focus on parental attachment without altering the instrument. The PAQ also measures students perceptions’ of how their parents foster autonomy and provide emotional support, which falls in line with classic student development theory (Sanford, 1967). In addition, the PAQ allows for subjects to choose a non-parent attachment figure, making it a better option for a diverse sample. Finally, the PAQ was designed for and has been primarily used on samples of college students who were the focus of this study.

The PAQ was developed by Maureen Kenny in the 1980s to measure Ainsworth et al.’s (1978) concept of perceived attachment in adolescents and young adults (Kenny, 1985). The 55-item instrument measures subjects’ perceptions of parental availability, acceptance, emotional support, and ability to cultivate independence, as well as students’ satisfaction with parental support and coping techniques in times of stress. The PAQ consists of three scales derived from factor analysis: (a) Affective Quality of Attachment; (b) Parental Fostering of Autonomy; and (c) Parental Role in Providing Emotional Support. The items are presented on a 5-point Likert scale (where 1 is not at all and 5 is very much), and scores are calculated for each scale. Students are asked to consider their parents as a single unit when responding. Research has shown that overall family environment is more important than individual relationships with parents (Kenny, 1994). However, instrument instructions allow for students to consider only one parent or another primary caregiver if separation, divorce, death, or re-marriage have broken the family unit.
The PAQ has been found valid and reliable, with a .92 test-retest score over a 2-week interval for the instrument as a whole, and scores ranging from .82 to .91 for each of the three scales (Kenny, 1990). Cronbach’s alpha was .96 for the first scale, .88 for the second, and .88 for the third (Kenny & Donaldson, 1991), and internal consistency as .93 for male and .95 for female students (Kenny, 1987). The PAQ has been favorably compared with subscales from other instruments measuring similar constructs such as the Moos Family Environmental Scale (FES; Moos, 1985; Kenny & Donaldson, 1991); Family Adaptability and Cohesion Evaluation Scale (FACES-III; Olson, 1986; Holmbeck & Wandrei, 1993); and the Inventory for Peer and Parental Attachment (IPPA; Armsden & Greenberg, 1987; Heiss et al., 1996).

In a study to assess five different scales of parental attachment, Heiss et al. (1996) found that the PAQ has convergent and construct validity. Using factor and correlational analysis, the researchers found that the PAQ adequately assessed constructs of attachment theory in relation to the other scales and had the expected correlation with scores on various personality criterion scales.

*Moral judgment test.* The MJT was chosen for this research because it is the only instrument available that places emphasis on moral tasks rather than just moral attitudes which can allow subjects less ability to fake their scores upward (Lind, 2008). In other words, the MJT measures the ability of an individual to make a moral judgment regardless of their opinion on a particular issue. The instrument measures the consistency of an individuals’ moral reasoning rather than their preference for a particular stage (Rest, Thoma, & Edwards, 1997). Created by Georg Lind in 1976, the MJT assesses “the ability
of people to judge moral arguments pro and con a controversial moral problem on the basis of their own moral principles, that is, irrespective of their opinion on the particular problem” (Lind, 2008, p. 195).

The MJT is a multiple choice instrument consisting of two hypothetical situations. Each short story is followed with a series of questions and items to rate. Subjects are instructed to read each dilemma, evaluate the choice of the character in the story, and then rate six arguments in favor of the character’s decision (pro arguments) and six arguments against the character’s decision (contra arguments) on a scale of -4 (strongly reject) to +4 (strongly accept).

Results are converted in a C score which represents the subjects’ moral judgment competence, “the ability of a subject to accept or reject arguments on a particular moral issue consistently in regard to their moral quality even though they oppose the subject’s stance on that issue” (Lind, 2008, p. 200). C score can range between 1 and 100 and indicates the percentage of “the degree to which individuals accept or reject arguments in a discussion on a moral issue in regard to their moral quality rather than in regard to their agreement with his or her opinion or other non-moral properties” (Lind, 2008, p. 200). Various C scores can be interpreted by the following categories: very low (1-9), low (10-19), medium (20-29), high (40-49) and extraordinarily high (above 50). C scores are calculated using a coding scheme that assigns each argument to the six stages of moral reasoning. First, the mean sum of squares is calculated by grouping the arguments according to the coding scheme, summing the positive and negative response for each argument, summing the squares of those sums, and finding the mean sum of squares.
Next, the total deviation sum of squares must be calculated by squaring all raw data to find the unadjusted total sum of squares, summing these squares, and subtracting the mean sum of squares. Then the adjusted stage sum of squares is calculated by summing the four items that belong to each reasoning stage and squaring the sum. The resulting six squared sums are then summed and divided by four, the number of repeated measures for each reasoning stage. This results in the unadjusted stage sum of squares. To arrive at the adjusted stage sum of squares, subtract the mean sum of squares from the unadjusted stage sum of squares. Finally, the stage sum of squares is divided by the total deviation sum of squares, yielding the coefficient of determination, $r^2$. The final C score is determined by multiplying the coefficient of determination by 100.

The MJT was designed to measure the constructs of the Dual-Aspect Theory of Moral Behavior and Development, and the hypotheses of the theory have been extensively tested (Lind, 2008). Five empirical criteria derived from the theory were proven valid: (a) preference for higher stages of Kohlberg’s theory over lower stages; (b) the correlations between stages are quasi-simplex; (c) moral attitudes are parallel to moral competency; (d) pro and con arguments are equivalent; and (e) the instrument contains difficult moral tasks making it impossible to fake the C score upwards even when coached. In all of these tests, the MJT proved valid, even with cross-cultural samples (Lind, 2008). Because the MJT is an experimental questionnaire designed to measure subtle changes in an individual’s moral-cognitive structure, Lind does not encourage the use of item analysis or test-retest reliability as these tests could mask changes in moral judgment competence as measurement error or unreliability (Lind,
In addition, the Character Education Partnership (2005) rated the instrument high in reliability and validity with relative ease in administration and scoring in comparison to all the available assessments of moral development available. Finally, the MJT provides more metrics, takes less time to complete, and more accurately gauges changes based on educational programs than any other instrument (Lind, 2008).

Lind (1995) argued that the validity and reliability of a moral development instrument must be contained within the terms of constructs explained by the theoretical model. In a paper presented at the 1995 AERA meeting, Lind said that the use of indicators of validity and reliability such as Cronbach’s alpha and criterion correlation are detrimental to the understanding of cognitive-structural models of moral development. Therefore, these indicators were not available for the MJT.

To test this assertion and provide more information to moral development researchers regarding instrument selection, Bell (1998) dedicated his doctoral thesis to a comparative analysis between the Defining Issues Test (DIT) and Moral Judgment Test (MJT). He administered both instruments along with a civil religion index to a group of 97 African-American college students, comparing the correlations between the DIT and civil religion index with those between the MJT and the index. Findings indicated that the MJT was the superior instrument in measuring subjects’ cognitive structure in terms of moral reasoning.

**Pilot Study**

A pilot study was conducted to assess the planned order of instruments and the effectiveness of general instructions. Eighty subjects sharing similar characteristics of the
population were asked to complete the web survey. These subjects were selected randomly from a different campus of the same northeastern university used in the study. There were 20 versions of the web survey with the instruments in different orders, and four students were asked to complete each version of the survey. Afterwards, students were asked a series of questions about their experience. A pre-notice of the survey was sent to the students. A second e-mail, containing the link to the survey was sent and was followed by three subsequent reminders. A total of 12 students completed the entire survey. Five students began the survey but did not complete it. Completion rate for the survey was 15.18%. The completion rate was lower than anticipated, but there were no additional incentives given for students to complete the survey.

The order of the instruments often effects response rate (Sieving, Hellerstedt, Mcneely, Fee, Snyder & Resnick, 2005), but in the case of the current research, the data from the pilot study did not indicate that a particular order of the instruments led to a change in response rate. Sieving et al. (2005) also explained, “It is commonly assumed that more sensitive questions should be asked later in a survey; respondents become gradually desensitized to more intimate items” (p. 160). The surveys were presented in the following order: (a) demographic questionnaire, (b) Moral Judgment Test (MJT), (c) Spiritual Experience Index-Revised (SEI-R), and (d) Parental Attachment Questionnaire (PAQ).

A short follow-up survey was sent to responders and to those who completed part of the survey, and five students provided feedback. All students indicated that an incentive would make it more attractive to respond. All respondents indicated that they
thought offering a chance to win a $100 Amazon.com gift card would make students much more or somewhat more likely to respond to the survey. The respondents reported an average time of 14 minutes to complete the instrument, and 60% felt the instrument was not too long. Students who had not completed the survey also were contacted to determine the reason for not responding. The three students who answered the non-responder survey indicated that they were too busy or did not have time to complete the survey.

Given the response rate on the pilot survey, the following strategies were employed to increase the response rate. Respondents were entered into a drawing for one of five $100 gift cards from Amazon.com. Amazon.com was chosen as the incentive because students can purchase a wide variety of items from textbooks to music to recreational items. Deutskens, Ruyter, Wetzels, and Oosterveld (2004) proposed that “lotteries are probably the most effective reward in an online environment, as they lead to the highest response rate in the short version [of a survey] and still a respectable response in the long version, while being much more cost–efficient than vouchers” (p. 32). They also found that respondents who were offered entrance into a lottery responded more quickly than those given a voucher. They surmised that respondents may believe they have a greater chance of winning if they respond quickly. Bosnjak and Tuten (2003) also found offering subjects the opportunity to be entered into a prize drawing increases response rates and reduces the number of incomplete submissions in web surveys.
Data Collection

Data were collected via instruments delivered to students electronically using the commercial software Zoomerang®. Best, Kruegar, Hubbard, & Smith (2001) expressed concern regarding the use of internet surveys since some populations may not have access to the internet. This concern is addressed since all members of this population had internet access and e-mail by virtue of their student status and the resources provided to them by their respective universities.

The instrument questions and instructions were identical to the paper-and-pencil version. Research has shown that in general, adapting paper-and-pencil questionnaires into web versions has not impacted validity and reliability of the instruments (Best et al., 2001). One survey with the demographic questionnaire and three instruments was sent to the selected students. After viewing the Waiver of Informed Consent, the subjects were asked to complete the demographic questionnaire, then the MJT, the SEI-R, and finally the PAQ. After participants clicked the “submit” button, a thank you message was displayed. Each page used a consistent design scheme. Instruments were placed in the order determined by the pilot study to be most appealing to subjects, (a) demographics questionnaire, (b) MJT Worker’s Dilemma, (c) MJT Doctor’s Dilemma, (d) SEI-R, and (e) PAQ.

In an attempt to reduce nonresponse error, five contacts and specific methods of survey implementation were used as recommended by Dillman (2000). First, all students’ directory information releasable under the Family Educational Rights to Privacy Act was obtained through an Open Records request to the institutions’ registrar’s offices. Dillman
(2000) suggested that subjects receive a physical post card through postal mail to increase response rates. However, staff at the University of Nebraska-Lincoln Evaluation and Research (NEAR) Center informed the researchers that postal mail is ineffective with student populations because many do not list current addresses (C. Haines, personal communication, October 19, 2007). In lieu of a physical post card, students were sent a preliminary e-mail notifying them that an electronic survey would be sent to them in one week (Appendix A). They were informed of the nature of the study and the importance of their contributions. The e-mail also told them about an incentive to complete the survey. The incentive was automatic entry into a drawing for one of five $100 gift certificates from Amazon.com.

One week after the pre-notice e-mail, a follow-up e-mail was sent to all subjects informing them that they had been selected to participate in a survey (Appendix B). The message explained that the purpose of the survey is to help higher education administrators better understand the importance of parents in college students’ lives. The e-mail contained a link to the survey. The initial page of the survey (Appendix C) contained the Institutional Review Board Waiver of Informed Consent. Students who agreed to the Institutional Review Board Waiver of Informed Consent clicked on the link and were automatically transferred to the first page of the web-based questionnaire.

After one more week, a thank you/reminder message was e-mailed to each student (Appendix D). The short e-mail message thanked the student for participating in the study and provided the link again in case the student has not completed the survey. Ten days
later, another e-mail was sent members of the sample who had not yet responded (Appendix E).

As the final contact, Dillman (2000) suggested sending each nonresponsive subject a letter via priority mail to urge participation. Again, based on advice from staff at the NEAR Center that postal mail is not effective with college students, this approach was not used (C. Haines, personal communications, October 19, 2007). NEAR Center staff also advised against calling each nonresponsive member, indicating that this approach could make subjects feel their confidentiality was not secure. Therefore, the final contact was by e-mail as well (Appendix F). This message was sent 14 days after the last message to further increase response rates. The e-mail offered the survey link again, encouraged participants to ask questions of the researchers, and stressed the importance of the study.

Data Analysis

Data were analyzed using both descriptive and inferential statistics to answer each research question:

R1: Was there a correlation between students’ perceived parental attachment and their overall percentage of demonstrated moral judgment competence?

This research question was analyzed using Pearson product moment correlation coefficient for the relationship between the MJT C score and the PAQ total score. The coefficient of determination, R squared, addressed the total variation in the MJT C scores explained by the PAQ value.
R2: What was the students’ demonstrated moral judgment competence, and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

This research question was answered by calculating the mean of the entire sample’s C scores. In addition, differences in C scores based on demographic variables were calculated using either t-tests (gender and ethnicity) or analysis of variance (ANOVA; class standing and age). These calculations provided a preliminary illustration of the moral reasoning in the Millennial generation sample.

R3: What were the students’ overall scores and the scores on the subscales of the Parental Attachment Questionnaire (PAQ), and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

Similar to the procedure for R2, the mean of the entire sample’s total PAQ score as well as differences in the total score based on demographic variables were calculated using t-tests and ANOVA. In addition, because the PAQ scales (Affective Quality of Attachment, Parental Fostering of Autonomy, and Parental Role in Providing Emotional Support) have been determined to be highly correlated, each scale of the PAQ and impact of demographic variables was assessed using t-tests and ANOVA.

R4: Were there differences in the correlation between students’ overall percentage of demonstrated moral judgment competence and perceived parental attachment between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?
The data were analyzed using Pearson product moment correlation coefficient for the relationship between the MJT C score and each of the PAQ scores (Total, Affective Quality of Attachment, Parental Fostering of Autonomy, and Parental Role in Providing Emotional Support) for each demographic group. The coefficient of determination, R squared, addressed the total variation in the MJT C scores explained by the PAQ values.

**Research Validity**

Threats to internal and design validity compromise many research projects and should be managed carefully. In this study, threats involving sample selection and regression to the mean were prevented by surveying the entire population. Threats from history, maturation, repeated testing, regression to the mean, and selection-maturation interaction were prevented by subjects completing all instruments at the same time. Instrumentation threats were prevented by using instruments that have been determined to be reliable through other research studies. Experimenter bias was prevented by distributing all instruments in the same manner and giving all participants the same instructions. Experimental mortality threats pose a problem if participants do not complete all three instruments, but this was controlled by discarding subjects that submitted incomplete surveys. Nonresponse bias is another issue that may have impacted results. Creswell (2008) said, “response bias [also called nonresponse bias] occurs in survey research when responses do not accurately reflect the views of the sample and the population” (p. 403). Issues involving nonresponse bias will be discussed in Chapter 4.
**Ethical Issues**

Research in which no manipulation to subjects is conducted poses very few ethical dilemmas. However, the researcher ensured that each subject was provided with information concerning the risks and benefits of the research project and had ample opportunity and access to ask questions. A Waiver of Informed Consent as required by all participating institutions was included in the instrument. In addition, where it was necessary to collect names in connection with data, the data was kept confidential and subjects’ names were maintained separately from their scores.

**Summary**

The purpose of this quantitative study was to examine the correlation between parental attachment and moral judgment competence of college students in the context of their Millennial generation characteristics. The results add to the literature on parental attachment and moral reasoning and provide information to higher educational professionals which may help in developing strategies to assist students in their moral development.

Analysis and results of the study will be outlined in the following chapter. Each hypothesis will be addressed using appropriate descriptive statistics, correlation analysis, Tukey HSD post-hoc tests, t-tests, ANOVA and inferential statistics.
Chapter 4

Results

The purpose of this study was to determine if there exists a correlation between parental attachment and the moral judgment competence of college students in the context of their Millennial generation characteristics in order to assist higher education administrators in developing programs that increase the moral development of students and informing parents of how their behavior may influence a student’s moral judgment competence, as well as provide a foundation for future research on this topic. Other researchers found conflicting evidence of a relationship between these two variables, and experts hypothesized that changing characteristics of Millennial generation college students might impact findings. In order to add to the literature on this issue, the researcher tested for a correlation between scores on the Parental Attachment Questionnaire (PAQ) and the Moral Judgment Test (MJT). Four research questions, with corresponding hypotheses, regarding the correlation of parental attachment and moral judgment competence of Millennial generation college students from two regional campuses of a university in the Northeastern United States were addressed.

Description of Sample

The study included two instruments: The Parental Attachment Questionnaire (PAQ) and the Moral Judgment Test (MJT), and a demographic questionnaire. The survey yielded 1,272 valid responses from a population of 6,091 (20.88% response rate). Table 3 reports the demographic characteristics of the respondents. Hispanic students, both Caucasian and non-Caucasian, were included in the non-Caucasian data.
### Table 3

*Demographic Characteristics of Respondents*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>566</td>
<td>44.5</td>
</tr>
<tr>
<td>Male</td>
<td>699</td>
<td>55.0</td>
</tr>
<tr>
<td>Missing</td>
<td>7</td>
<td>0.5</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>1007</td>
<td>79.2</td>
</tr>
<tr>
<td>Non-Caucasian</td>
<td>265</td>
<td>20.8</td>
</tr>
<tr>
<td>Class Standing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>357</td>
<td>28.2</td>
</tr>
<tr>
<td>Sophomore</td>
<td>347</td>
<td>27.3</td>
</tr>
<tr>
<td>Junior</td>
<td>285</td>
<td>22.4</td>
</tr>
<tr>
<td>Senior</td>
<td>283</td>
<td>22.2</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>463</td>
<td>36.4</td>
</tr>
<tr>
<td>20-21</td>
<td>524</td>
<td>41.2</td>
</tr>
<tr>
<td>22-23</td>
<td>218</td>
<td>17.1</td>
</tr>
<tr>
<td>24-25</td>
<td>67</td>
<td>5.3</td>
</tr>
</tbody>
</table>

N=1272

Tables 1 and 2 on page 81 describe the demographic characteristics of the population and surveyed campuses. The overall population was comprised of 41% females and 59% males but respondents were 45% females and 55% males. Males
responded at a lower rate than females. Of the total population surveyed, 23% of females who were sent the survey responded and 19% of males who were surveyed responded.

Racial and ethnic data were not available for the population, but based on the total enrollment of the campuses (including students under and over 18-25 age range specified by this study), 19% of Caucasians responded and 20% of non-Caucasians responded.

The overall population was comprised of 18-19 year-old students (44%), 20-21 year-old students (36%), 22-23 year-old students (16%) and 24-25 year-old students (5%). Response levels were (a) 18-19, 36%; (b) 20-21, 41%; (c) 22-23, 17%; and (d) 24-25, 5%. Thus, 18-19 year-olds responded at a lower level but 20-21 year-olds responded at a higher level than the total population. Of the group surveyed, 17% of 18-19 year olds responded, 24% of 20-21 year olds responded, 23% of 22-23 year olds responded, and 23% of 24-25 year olds responded.

Data regarding class standing were not available for the population, but based on the total enrollment of the campuses (including students under and over 18-25 age range specified by this study), response rates by class were (a) Freshman responded at an 18% level, (b) Sophomores at a 24% level, (c) Juniors at a 23% level, and (d) Seniors at a 23% level.

**Nonresponse Bias**

Wave analysis was conducted to investigate possible nonresponse bias. Wave analysis is based on the assumption that subjects who responded later were more like non-respondents (Armstrong & Overton, 1977, p. 397). Four waves of responses were analyzed. The initial wave included responses to the survey from the time the initial
survey e-mail was sent until the first reminder (463 responses). The second wave included responses after the first reminder and until the second reminder (407 responses). The third wave included responses after the second reminder until the final reminder (119 responses). The final wave included responses after the final reminder was sent (283 responses). An ANOVA was used to compare means for the scales of the PAQ and the MJT scores for responses in the four waves. There were no significant difference in mean scores on the MJT scores between waves. Typically, one looks for differences between the first and later waves to determine if nonresponse bias is present. Follow-up tests were conducted to evaluate pairwise differences among the means using Tukey HSD test. No

<table>
<thead>
<tr>
<th>Scale</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJT</td>
<td>Between Groups</td>
<td>168.87</td>
<td>3</td>
<td>56.29</td>
<td>0.30</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>235,853.74</td>
<td>1268</td>
<td>186.01</td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>Between Groups</td>
<td>1,207.59</td>
<td>3</td>
<td>402.53</td>
<td>1.96</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>260,194.53</td>
<td>1268</td>
<td>205.20</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Between Groups</td>
<td>192.58</td>
<td>3</td>
<td>64.19</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>78,814.87</td>
<td>1268</td>
<td>62.16</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Between Groups</td>
<td>289.57</td>
<td>3</td>
<td>96.53</td>
<td>1.44</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>85,303.62</td>
<td>1268</td>
<td>67.27</td>
<td></td>
</tr>
<tr>
<td>PAQ Total</td>
<td>Between Groups</td>
<td>1,640.94</td>
<td>3</td>
<td>546.98</td>
<td>0.78</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>885,558.56</td>
<td>1268</td>
<td>698.30</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05
pairwise differences were found between any of the response waves. Data were analyzed at the 95 percent confidence level.

Table 5

**ANOVA for Demographics by Response Wave**

<table>
<thead>
<tr>
<th>Demographic</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.47</td>
<td>3</td>
<td>0.82</td>
<td>3.34</td>
<td>0.019*</td>
</tr>
<tr>
<td>Within Groups</td>
<td>310.29</td>
<td>1261</td>
<td>0.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian or non-Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2.09</td>
<td>3</td>
<td>0.70</td>
<td>4.25</td>
<td>0.005**</td>
</tr>
<tr>
<td>Within Groups</td>
<td>207.71</td>
<td>1268</td>
<td>0.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class Standing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>8.15</td>
<td>3</td>
<td>2.72</td>
<td>2.19</td>
<td>0.088</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1,574.00</td>
<td>1268</td>
<td>1.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>0.75</td>
<td>3</td>
<td>0.25</td>
<td>0.34</td>
<td>0.797</td>
</tr>
<tr>
<td>Within Groups</td>
<td>938.56</td>
<td>1268</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05, ** p < .005, 7 missing values for gender

Using an ANOVA, significant differences were found in the rate of responses between gender and ethnicity (Table 5). Tukey HSD tests were used to reveal the sources of these discrepancies (see Appendix J and K). These tests revealed that males and non-Caucasians were more likely to respond later than females and Caucasians. Based on these results, males were more likely to be non-responders than females, and non-Caucasians were more likely to be non-responders than Caucasians. Table 6 shows
response rates for males and females by response wave, and Table 7 shows response rates for Caucasians and non-Caucasians by response wave.

Table 6

*Response Rates for Females and Males by Response Wave*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Female</th>
<th>Male</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>231</td>
<td>40.8</td>
<td>230</td>
</tr>
<tr>
<td>2</td>
<td>175</td>
<td>30.9</td>
<td>231</td>
</tr>
<tr>
<td>3</td>
<td>52</td>
<td>9.2</td>
<td>67</td>
</tr>
<tr>
<td>4</td>
<td>108</td>
<td>19.1</td>
<td>171</td>
</tr>
<tr>
<td>Total</td>
<td>566</td>
<td>100</td>
<td>699</td>
</tr>
</tbody>
</table>

7 missing values for gender

Table 7

*Response Rates for Caucasians and Non-Caucasians by Response Wave*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Caucasian</th>
<th>Non-Caucasian</th>
<th>Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>1</td>
<td>79</td>
<td>29.8</td>
<td>384</td>
</tr>
<tr>
<td>2</td>
<td>79</td>
<td>29.8</td>
<td>328</td>
</tr>
<tr>
<td>3</td>
<td>32</td>
<td>12.1</td>
<td>87</td>
</tr>
<tr>
<td>4</td>
<td>75</td>
<td>28.3</td>
<td>208</td>
</tr>
<tr>
<td>Total</td>
<td>265</td>
<td>100</td>
<td>1007</td>
</tr>
</tbody>
</table>
Summary

A wave analysis was conducted to determine if nonresponse bias was present in the data collected. Through the wave analysis, it was determined that males and non-Caucasians responded later and were more likely to be nonresponders.

Analysis of the Hypotheses

As data are presented in subsequent tables, names for instruments and subscales are shortened for ease of reading and clarity. Parental Attachment Questionnaire is referred to as PAQ, Affective Quality of Attachment is referred to as Affective, Parental Fostering of Autonomy is Autonomy, and Parental Role in Providing Emotional Support is Support. The Moral Judgment Test is MJT. Data were analyzed at a 95% confidence level. Where level of significance is higher, it is noted.

The descriptive statistics for the Parental Attachment Questionnaire (PAQ) overall score and three subscales (Affective, Autonomy, and Support) are shown in Table 8, and descriptive statistics for the Moral Judgment Test (MJT) are shown in Table 9.

Table 8

Descriptive Statistics for PAQ Scales

<table>
<thead>
<tr>
<th>PAQ Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affective</td>
<td>1272</td>
<td>97.72</td>
<td>14.34</td>
</tr>
<tr>
<td>Autonomy</td>
<td>1272</td>
<td>50.46</td>
<td>7.88</td>
</tr>
<tr>
<td>Support</td>
<td>1272</td>
<td>45.97</td>
<td>8.21</td>
</tr>
<tr>
<td>Total</td>
<td>1272</td>
<td>194.15</td>
<td>26.42</td>
</tr>
</tbody>
</table>
Table 9

*Descriptive Statistics for MJT Scores*

<table>
<thead>
<tr>
<th>MJT</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Score</td>
<td>1272</td>
<td>17.16</td>
<td>13.63</td>
</tr>
</tbody>
</table>

*Research Question 1: Was there a correlation between students’ perceived parental attachment and their overall percentage of demonstrated moral judgment competence?*

A Pearson Product-Moment Correlation was calculated to determine the association between the PAQ scores and the total score and the MJT C score. The correlation analysis is shown on Table 10. These data are used to test hypotheses H1a-H1d.

H1a: There was no correlation between the total score on the Parental Attachment Questionnaire (PAQ) and the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT). The hypothesis was not rejected. There was no significant correlation $r(1270) = 0.017$, $p > .05$, between the total PAQ score and the C score.

H1b: There was no correlation between the Affective Quality of Attachment subscale and the percentage of demonstrated moral judgment competence (C score). The hypothesis was not rejected. There was no significant correlation $r(1270) = 0.023$, $p > .05$, between the Affective Quality of Attachment subscale score and the C score.

H1c: There was no correlation between the Parental Fostering of Autonomy subscale and the percentage of demonstrated moral judgment competence (C score). The
hypothesis was not rejected. There was no significant correlation $r(1270) = 0.054, p > .05$, between the Parental Fostering of Autonomy subscale score and the C score.

Table 10

**Correlations between PAQ Scales and MJT Scores**

<table>
<thead>
<tr>
<th>Scale</th>
<th>MJT</th>
<th>Affective</th>
<th>Autonomy</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>M JT</td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>Pearson Correlation</td>
<td>0.023</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.409</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Pearson Correlation</td>
<td>0.054</td>
<td>0.754***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.055</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Pearson Correlation</td>
<td>-0.038</td>
<td>0.568***</td>
<td>0.452***</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.173</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Total PAQ</td>
<td>Pearson Correlation</td>
<td>0.017</td>
<td>0.944**</td>
<td>0.848**</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.550</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

N=1272, *** $p < .001$

H1d: There was no correlation between the Parental Role in Providing Support subscale and the percentage of demonstrated moral judgment competence (C score). The hypothesis was not rejected. There was no significant correlation $r(1270) = -0.038, p > .05$, between the Parental Role in Providing Support subscale score and the C score.

**Summary.** No correlation was found between parental attachment and moral judgment competency in the population studied.
Research Question 2: What was the students’ demonstrated moral judgment competence, and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

The next hypotheses correlated the Moral Judgment Test C score to gender, ethnicity, class standing, and age. T-tests were used to assess this relationship for H2a and H2b while analyses of variance (ANOVA) were used for H2c and H2d.

**Gender.** H2a: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between males and females. Table 11 provides the means, standard deviations and t-test statistics of the C scores for males and females. The hypothesis was not rejected. There was no significant difference $t(1263) = -1.731, p > .05$ between the mean C scores of males and females.

Table 11

*Descriptive Statistics and t-tests for MJT Scores by Gender*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Gender</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>T</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>566</td>
<td>699</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>16.43</td>
<td>17.76</td>
<td></td>
<td></td>
<td></td>
<td>-1.731</td>
<td>1263</td>
<td>0.084</td>
</tr>
<tr>
<td>SD</td>
<td>13.50</td>
<td>13.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7 values missing for gender

**Ethnicity.** H2b: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between Caucasians and non-Caucasians (Hispanic Caucasians were included in the non-Caucasian group).

Table 12 provides the means, standard deviations and t-test statistics of the C scores for Caucasians and non-Caucasians. The hypothesis was not rejected. There was no
significant difference $t(1270) = 0.484, p > .05$ between the mean C scores of Caucasians and non-Caucasians.

**Class standing.** H2c: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students with different class standings. The hypothesis was not rejected. Table 13 reports means and standard deviations for C scores by class standing. Table 14 shows the results of a one way ANOVA that found no differences $F(3,1268) = 1.081, p > .05$, between students by class standing (freshman, sophomore, junior and senior). Follow-up tests

Table 12

**Descriptive Statistics and t-tests for the MJT Scores by Ethnicity**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Caucasian</th>
<th>Non-Caucasian</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>t</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>C Score</td>
<td>1007</td>
<td>17.30</td>
<td>265</td>
<td>16.64</td>
<td>12.91</td>
<td></td>
<td></td>
<td></td>
<td>-0.701</td>
<td>1270</td>
<td>0.484</td>
</tr>
</tbody>
</table>

Table 13

**Descriptive Statistics for MJT Scores by Class Standing**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Class Year</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJT</td>
<td>Freshman</td>
<td>357</td>
<td>18.11</td>
<td>14.05</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>347</td>
<td>17.10</td>
<td>13.93</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>285</td>
<td>17.00</td>
<td>13.62</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>283</td>
<td>16.19</td>
<td>12.68</td>
</tr>
</tbody>
</table>
were conducted to evaluate pairwise differences among the means using Tukey HSD test. No pairwise differences were found in C score means by class standing.

Table 14

*ANOVA for MJT Scores and Class Standing*

<table>
<thead>
<tr>
<th>Scale</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJT</td>
<td>Between Groups</td>
<td>601.98</td>
<td>3</td>
<td>200.66</td>
<td>1.081</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>235,420.63</td>
<td>1268</td>
<td>185.66</td>
<td></td>
</tr>
</tbody>
</table>

**Age group.** H2d: There was no difference in the percentage of demonstrated moral judgment competence (C score) on the Moral Judgment Test (MJT) between students in different age groups. Students were grouped into four age categories: ages 18-19, 20-21, 22-23, and 24-25. The hypothesis was not rejected. Table 15 reports means and standard deviations for C scores by age group. A one way ANOVA found no differences $F(3,1268) = 1.094, p > .05$, between students by age group. Follow-up tests were conducted to evaluate pairwise differences among the means using Tukey HSD test.

Table 15

*Descriptive Statistics for MJT Scores by Age Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Class Year</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJT</td>
<td>18-19</td>
<td>463</td>
<td>18.07</td>
<td>14.21</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>524</td>
<td>16.60</td>
<td>13.04</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>218</td>
<td>16.66</td>
<td>13.71</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>67</td>
<td>16.87</td>
<td>13.69</td>
</tr>
</tbody>
</table>
No pairwise differences were found in C score means by class standing. Table 16 reports these findings.

Table 16

ANOVA for MTJ Scores and Age Group

<table>
<thead>
<tr>
<th>Scale</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>MJT</td>
<td>Between Groups</td>
<td>609.44</td>
<td>3</td>
<td>203.15</td>
<td>1.094</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>235,413.16</td>
<td>1268</td>
<td>185.66</td>
<td></td>
</tr>
</tbody>
</table>

Summary. No significant differences in the MJT were found between males and females, Caucasians and non-Caucasians, students of different class standings, and students of different age groups.

Research Question 3: What were the students’ overall scores and the scores on the subscales of the Parental Attachment Questionnaire (PAQ), and were there differences between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?

The next hypotheses explored PAQ total score and subscale scores in terms of gender, ethnicity, class standing, and age. Table 17 displays the descriptive statistics and t-test results for the Affective, Autonomy, and Support scales as well as the total PAQ score by gender. These data refer to hypotheses H3a-H3d.

Gender. H3a: There was no difference between males and females on the total Parental Attachment Questionnaire (PAQ) score. The hypothesis was not rejected. The mean total PAQ scores between males and females were not significantly different, t(1263) = 1.306, p > .05.
H3b: There was no difference between males and females on the PAQ Affective Quality of Attachment subscale. The hypothesis was not rejected. The mean Affective Quality of Attachment scores between males and females were not significantly different, $t(1263) = 0.763, p > .05$.

H3c: There was no difference between males and females on the PAQ Parental Fostering of Autonomy subscale. The hypothesis was not rejected. There was no significant difference between males and females in Parental Fostering of Autonomy, $t(1263) = -1.669, p > .05$.

Table 17

*Descriptive Statistics and t-tests for the PAQ Scales by Gender*

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>T</th>
<th>Df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PAQ</td>
<td>699</td>
<td>193.24</td>
<td>25.92</td>
<td>566</td>
<td>195.19</td>
<td>26.95</td>
<td>1.306</td>
<td>1263</td>
<td>0.192</td>
</tr>
<tr>
<td>Affective</td>
<td>699</td>
<td>97.43</td>
<td>14.26</td>
<td>566</td>
<td>98.05</td>
<td>14.45</td>
<td>0.763</td>
<td>1263</td>
<td>0.446</td>
</tr>
<tr>
<td>Autonomy</td>
<td>699</td>
<td>50.77</td>
<td>7.80</td>
<td>566</td>
<td>50.03</td>
<td>7.96</td>
<td>-1.669</td>
<td>1263</td>
<td>0.095</td>
</tr>
<tr>
<td>Support</td>
<td>699</td>
<td>45.04</td>
<td>7.90</td>
<td>566</td>
<td>47.12</td>
<td>8.40</td>
<td>4.48</td>
<td>1175.62</td>
<td>0.000***</td>
</tr>
</tbody>
</table>

*7 values missing for gender; ***p < .001*

H3d: There was no difference between males and females on the PAQ Parental Role in Providing Emotional Support subscale. Because the Levene’s Test for Equality of Variances test was significant, equal variances were not assumed. The t-test was modified to correct for unequal variances. The hypothesis was rejected. There was a significant difference in mean scores for Parental Role in Providing Emotional Support, $t(1175.62) =$
4.48, $p < .001$. Women reported a higher score ($M = 47.12$, $SD = 8.40$) on this scale than did their male counterparts ($M = 45.04$, $SD = 7.90$).

**Ethnicity.** Hypotheses H3e-H3h investigate PAQ total score and subscales in terms of ethnicity. Table 18 displays the descriptive statistics and t-test results for the total PAQ score and Affective, Autonomy, and Support scales by ethnicity for each region.

H3e: There was no difference between Caucasians and non-Caucasians on the total Parental Attachment Questionnaire (PAQ) score. Because the Levene’s Test for Equality of Variances test was significant, equal variances were not assumed. The t-test was modified to correct for unequal variances. The hypothesis was rejected. The mean total PAQ scores between Caucasians and non-Caucasians were significantly different $t(347.41) = -5.97$, $p < .001$, with Caucasians ($M = 196.57$, $SD = 25.14$) scoring higher than non-Caucasians ($M = 184.92$, $SD = 29.06$).
H3f: There was no difference between Caucasians and non-Caucasians on the PAQ Affective Quality of Attachment subscale. Because the Levene’s Test for Equality of Variances test was significant, equal variances were not assumed. The t-test was modified to correct for unequal variances. The hypothesis was rejected. The mean Affective Quality of Attachment scores between Caucasians and non-Caucasians were significantly different \( t(374.36) = -6.58, p < .001 \), with Caucasians (M = 99.17, SD = 13.60) scoring higher than non-Caucasian students (M = 92.21, SD = 15.72).

H3g: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Fostering of Autonomy subscale. Because the Levene’s Test for Equality of Variances test was significant, equal variances were not assumed. The t-test was modified to correct for unequal variances. The hypothesis was rejected. The mean Parental Fostering of Autonomy scores between Caucasians and non-Caucasians were significantly different \( t(375.83) = -6.45, p < .001 \), with Caucasians (M = 51.23, SD = 7.50) scoring higher than non-Caucasians (M = 47.50, SD = 8.61).

H3h: There was no difference between Caucasians and non-Caucasians on the PAQ Parental Role in Providing Emotional Support subscale. The hypothesis was not rejected. There were no significant differences in the Parental Role in Providing Emotional Support score between Caucasians and non-Caucasians, \( t(1270) = -1.70, p > .05 \).

Class standing. The next set of hypotheses concerned the total score and subscales of the PAQ and class standing. Descriptive statistics for the total score, Affective, Autonomy, and Support scales of the Parental Attachment Questionnaire
(PAQ) by class standing are shown in Table 19. These data refer to H3i-H3l. A one-way ANOVA compared means scores for all three scales and total score of the PAQ by class standing as illustrated in Table 20.

Table 19

**Descriptive Statistics for PAQ Scales by Class Standing**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Class Year</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PAQ</td>
<td>Freshman</td>
<td>357</td>
<td>192.39</td>
<td>26.83</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>347</td>
<td>193.37</td>
<td>26.41</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>285</td>
<td>195.83</td>
<td>25.28</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>283</td>
<td>195.61</td>
<td>27.00</td>
</tr>
<tr>
<td>Affective</td>
<td>Freshman</td>
<td>357</td>
<td>96.60</td>
<td>14.60</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>347</td>
<td>97.43</td>
<td>14.43</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>285</td>
<td>98.41</td>
<td>13.87</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>283</td>
<td>98.78</td>
<td>14.34</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Freshman</td>
<td>357</td>
<td>49.27</td>
<td>7.91</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>347</td>
<td>50.22</td>
<td>7.98</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>285</td>
<td>51.30</td>
<td>7.21</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>283</td>
<td>51.39</td>
<td>8.21</td>
</tr>
<tr>
<td>Support</td>
<td>Freshman</td>
<td>357</td>
<td>46.52</td>
<td>8.29</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>347</td>
<td>45.73</td>
<td>7.79</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>285</td>
<td>46.12</td>
<td>8.41</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>283</td>
<td>45.44</td>
<td>8.38</td>
</tr>
</tbody>
</table>

H3i: There was no difference between college students by class standing on the total Parental Attachment Questionnaire (PAQ) score. The hypothesis was not rejected.
There was no significant difference in mean total PAQ score by class standing, $F(3,1268) = 1.30, p > .05$.

$H3j$: There was no difference between college students by class standing on the PAQ Affective Quality of Attachment subscale. The hypothesis was not rejected. There was no significant difference in mean score on Affective Quality of Attachment by class standing, $F(3,1268) = 1.51, p > .05$.

$H3k$: There was no difference between college students by class standing on the PAQ Parental Fostering of Autonomy subscale. The hypothesis was rejected. There was a significant difference in mean scores on the Autonomy scale by class standing, $F(3,1268) = 5.27, p < .001$. The Tukey HSD post-hoc procedure found significant pairwise differences between the mean scores of freshmen students and the mean scores of both junior and senior students on the Autonomy scale of the PAQ

Table 20

*ANOVA for PAQ Scales and Class Standing*

<table>
<thead>
<tr>
<th>Scale</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>2,721.95</td>
<td>3</td>
<td>907.32</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>884,477.55</td>
<td>1268</td>
<td>697.54</td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>Between Groups</td>
<td>932.74</td>
<td>3</td>
<td>310.91</td>
<td>1.51</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>260,469.38</td>
<td>1268</td>
<td>205.42</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Between Groups</td>
<td>972.61</td>
<td>3</td>
<td>324.20</td>
<td>5.27</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>78,034.83</td>
<td>1268</td>
<td>61.54</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Between Groups</td>
<td>216.79</td>
<td>3</td>
<td>72.26</td>
<td>1.07</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>85,376.41</td>
<td>1268</td>
<td>67.33</td>
<td></td>
</tr>
</tbody>
</table>

***$p < .001$**
(see Appendix L). Freshmen students (M = 49.27, SD = 7.91) scored significantly lower on this scale than did juniors (M = 51.30, SD = 7.21) or seniors (M = 51.39, SD = 8.21).

**H3l:** There was no difference between college students by class standing on the PAQ Parental Role in Providing Emotional Support subscale. The hypothesis was not rejected. There was no significant difference in mean score on the Support scale by class standing, $F(3,1268) = 1.07, p > .05$.

**Table 21**

*Descriptive Statistics for PAQ Scales by Age Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Age Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>18-19</td>
<td>463</td>
<td>192.88</td>
<td>26.17</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>524</td>
<td>194.21</td>
<td>26.43</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>218</td>
<td>195.56</td>
<td>26.71</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>67</td>
<td>197.85</td>
<td>27.12</td>
</tr>
<tr>
<td>Affective</td>
<td>18-19</td>
<td>463</td>
<td>96.89</td>
<td>14.12</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>524</td>
<td>97.78</td>
<td>14.55</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>218</td>
<td>98.49</td>
<td>14.21</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>67</td>
<td>100.46</td>
<td>14.45</td>
</tr>
<tr>
<td>Autonomy</td>
<td>18-19</td>
<td>463</td>
<td>49.38</td>
<td>7.88</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>524</td>
<td>50.57</td>
<td>7.58</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>218</td>
<td>51.52</td>
<td>8.15</td>
</tr>
<tr>
<td></td>
<td>23-24</td>
<td>67</td>
<td>53.57</td>
<td>8.17</td>
</tr>
<tr>
<td>Support</td>
<td>18-19</td>
<td>463</td>
<td>46.62</td>
<td>8.22</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>524</td>
<td>45.86</td>
<td>8.09</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>218</td>
<td>45.56</td>
<td>8.23</td>
</tr>
<tr>
<td></td>
<td>23-24</td>
<td>67</td>
<td>43.82</td>
<td>8.66</td>
</tr>
</tbody>
</table>
**Age group.** The next calculations assessed differences in PAQ total score and subscales by age group. Descriptive statistics for the total Parental Attachment Questionnaire score, the Affective Quality of Attachment scale, the Parental Fostering of Autonomy scale, and the Parental Role in Providing Emotional support scale by age group are shown in Table 21. These data refer to H3m-H3p. A one-way ANOVA compared mean scores for the total score and three subscales of the PAQ by age group as shown in Table 22.

Table 22

*ANOVA for PAQ Scales and Age Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>Between Groups</td>
<td>2,105.68</td>
<td>3</td>
<td>701.89</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>885,093.83</td>
<td>1268</td>
<td>698.02</td>
<td></td>
</tr>
<tr>
<td>Affective</td>
<td>Between Groups</td>
<td>957.72</td>
<td>3</td>
<td>319.24</td>
<td>1.55</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>260,444.39</td>
<td>1268</td>
<td>205.40</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>Between Groups</td>
<td>1,441.44</td>
<td>3</td>
<td>480.48</td>
<td>7.86</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>77,566.01</td>
<td>1268</td>
<td>61.17</td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>Between Groups</td>
<td>546.39</td>
<td>3</td>
<td>182.13</td>
<td>2.72</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>85,046.81</td>
<td>1285</td>
<td>67.07</td>
<td></td>
</tr>
</tbody>
</table>

*p < .05; ***p < .001

H3m: There was no difference between college students by age group on the total Parental Attachment Questionnaire (PAQ) score. The hypothesis was not rejected. There was no significant difference in mean score on the total PAQ score by age group, F(3,1268) = 1.01, *p > .05.*
H3n: There was no difference between college students by age group on the PAQ Affective Quality of Attachment subscale. The hypothesis was not rejected. There was no significant difference in mean score on the Affective subscale by age group, $F(3,1268) = 1.55, p > .05$.

H3o: There was no difference between college students by age group on the PAQ Parental Fostering of Autonomy subscale. The hypothesis was rejected. There was a significant difference in mean scores between age groups on the Autonomy subscale, $F(3,1268) = 7.86, p < .001$. The Tukey HSD post-hoc procedure found significant pairwise differences between the mean scores of 18-19 year old students and the mean scores of both 23-24 and 24-25 year old students (see Appendix M). The mean score for students age 18-19 ($M = 49.38, SD = 7.88$) was lower in Parental Fostering of Autonomy than the 22-23 age group ($M = 51.52, SD = 8.15$) and the 24-25 age group ($M = 53.57, SD = 8.17$).

H3p: There was no difference between college students by age group on the PAQ Parental Role in Providing Emotional Support subscale. The hypothesis was rejected. There was a significant difference in mean scores between age groups on the Support subscale, $F(3,1268) = 2.72, p < .05$. The Tukey HSD post-hoc procedure found significant pairwise differences between the mean scores of 18-19 year old students and the mean scores of 24-25 year old students (see Appendix N). The mean score for students age 18-19 ($M = 46.62, SD = 8.22$) was higher in Parental Role in Providing Emotional Support than the 24-25 age group ($M = 43.82, SD = 8.66$).
**Summary.** For the population studied, only the Emotional Support score of the PAQ differed significantly between females and males, with females scoring higher. Caucasian and non-Caucasian students demonstrated significant differences in the Affective, Autonomy, and Total PAQ scores. Caucasian students had higher scores on these three measures. Freshmen students scored lower than both juniors and seniors on Parental Fostering of Autonomy, but there were no pair-wise differences with sophomores. Students aged 18-19 scored higher than students aged 24-25 on Parental Role in Providing Emotional Support, but scores on Autonomy increased significantly as students got older.

**Research Question 4: Were there differences in the correlation between students’ overall percentage of demonstrated moral judgment competence and perceived parental attachment between the following groups: males and females; Caucasians and non-Caucasians; students by class standing; and age?**

The final set of hypotheses considered the correlation between parental attachment and moral judgment competence by demographic characteristics. The total PAQ score and all PAQ subscale scores are analyzed using a Pearson Product Moment Correlation.

**Gender.** H4a: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for males and for females. For the correlation between the MJT score with total PAQ score, the Affective score, the Autonomy score, and the Support score, the hypothesis was not rejected for both males and females. There was no significant correlation in between PAQ total scores and MJT
scores for males, $r(698) = 0.049$, $p > .05$, or females, $r(565) = -0.017$, $p > .05$. There was also no correlation between the Affective subscale score and MJT scores for males, $r(698) = 0.059$, $p > .05$, or females, $r(565) = -0.019$, $p > .05$; between the Autonomy score and MJT score for males, $r(698) = 0.072$, $p > .05$, or females, $r(565) = 0.027$, $p > .05$; or between the Support score and MJT score for males, $r(698) = -0.016$, $p > .05$, or females, $r(565) = -0.047$, $p > .05$ (see Table 23).

Table 23  

*Correlations Between PAQ Scales and MJT Score by Gender*

<table>
<thead>
<tr>
<th></th>
<th>MJT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>PAQ Total</td>
<td>Pearson Correlation</td>
<td>0.049</td>
<td>-0.017</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.192</td>
<td>0.693</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>699</td>
<td>566</td>
</tr>
<tr>
<td>Affective</td>
<td>Pearson Correlation</td>
<td>0.059</td>
<td>-0.019</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.119</td>
<td>0.660</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>699</td>
<td>566</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Pearson Correlation</td>
<td>0.072</td>
<td>0.027</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.057</td>
<td>0.522</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>699</td>
<td>566</td>
</tr>
<tr>
<td>Support</td>
<td>Pearson Correlation</td>
<td>-0.016</td>
<td>-0.047</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.680</td>
<td>0.263</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>699</td>
<td>566</td>
</tr>
</tbody>
</table>

7 scores missing for gender

*Ethnicity.* H4b: There was no difference in terms of the correlation of perceived parental attachment and moral judgment competence for Caucasians and for non-
Caucasians. For the correlation between the MJT score with total PAQ score, the Affective score, and the Support score, the hypothesis was not rejected for both Caucasians and non-Caucasians. The hypothesis was also not rejected for the correlation between the MJT score and Autonomy score for Caucasians. The hypothesis was rejected for the correlation between the MJT score and Autonomy score for non-Caucasians.

Table 24

*Correlations Between PAQ Scales and MJT Scores by Ethnicity*

<table>
<thead>
<tr>
<th></th>
<th>MJT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Caucasian</td>
<td>Non-Caucasian</td>
</tr>
<tr>
<td>PAQ Total</td>
<td>Pearson Correlation</td>
<td>-0.008</td>
<td>0.090</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.794</td>
<td>0.143</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1007</td>
<td>265</td>
</tr>
<tr>
<td>Affective</td>
<td>Pearson Correlation</td>
<td>-0.006</td>
<td>0.112</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.838</td>
<td>0.068</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1007</td>
<td>265</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Pearson Correlation</td>
<td>0.031</td>
<td>0.123*</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.327</td>
<td>0.045</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1007</td>
<td>265</td>
</tr>
<tr>
<td>Support</td>
<td>Pearson Correlation</td>
<td>-0.044</td>
<td>-0.023</td>
</tr>
<tr>
<td></td>
<td>Sig.</td>
<td>0.164</td>
<td>0.715</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1007</td>
<td>265</td>
</tr>
</tbody>
</table>

*p < .05
There was no significant correlation between PAQ total scores and MJT scores for Caucasians, \( r(1006) = -0.008, p > .05 \), or non-Caucasians, \( r(264) = 0.090, p > .05 \); between Affective scores and MJT scores for Caucasians, \( r(1006) = -0.006, p > .05 \), or
non-Caucasians, \( r(264) = 0.112, p > .05 \); or between Support scores and MJT for Caucasians, \( r(1006) = -0.044, p > .05 \), or non-Caucasians, \( r(264) = -0.023, p > .05 \). There was a significant correlation between the MJT score and Autonomy score for non-Caucasians, \( r(264) = 0.123, p < .05 \), but not for Caucasians, \( r(1006) = 0.031, p > .05 \) (see Table 24).

### Correlations Between PAQ Scales and MJT Scores by Class Standing

<table>
<thead>
<tr>
<th></th>
<th>Freshman</th>
<th>Sophomores</th>
<th>Juniors</th>
<th>Seniors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PAQ Total</strong></td>
<td>Pearson Correlation</td>
<td>0.005</td>
<td>0.110*</td>
<td>0.020</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.925</td>
<td>0.041</td>
<td>0.735</td>
<td>0.171</td>
</tr>
<tr>
<td>N</td>
<td>357</td>
<td>347</td>
<td>285</td>
<td>283</td>
</tr>
<tr>
<td><strong>Affective</strong></td>
<td>Pearson Correlation</td>
<td>0.024</td>
<td>0.111*</td>
<td>0.024</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.653</td>
<td>0.039</td>
<td>0.681</td>
<td>0.157</td>
</tr>
<tr>
<td>N</td>
<td>357</td>
<td>347</td>
<td>285</td>
<td>283</td>
</tr>
<tr>
<td><strong>Autonomy</strong></td>
<td>Pearson Correlation</td>
<td>0.029</td>
<td>0.139**</td>
<td>0.057</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.581</td>
<td>0.009</td>
<td>0.336</td>
<td>0.976</td>
</tr>
<tr>
<td>N</td>
<td>357</td>
<td>347</td>
<td>285</td>
<td>283</td>
</tr>
<tr>
<td><strong>Support</strong></td>
<td>Pearson Correlation</td>
<td>-0.054</td>
<td>0.024</td>
<td>-0.029</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.310</td>
<td>0.656</td>
<td>0.628</td>
<td>0.050</td>
</tr>
<tr>
<td>N</td>
<td>357</td>
<td>347</td>
<td>285</td>
<td>283</td>
</tr>
</tbody>
</table>

*\( p < .05 \), **\( p < .01 \)

was a significant correlation between the MJT score and Autonomy score for non-Caucasians, \( r(264) = 0.123, p < .05 \), but not for Caucasians, \( r(1006) = 0.031, p > .05 \) (see Table 24).

**Class standing.** H4c: There was no difference in terms of the correlation of
perceived parental attachment and moral judgment competence for students of different
class standings. The hypothesis was not rejected for all PAQ scores for freshman, juniors,
and seniors, and for sophomores in the Support subscale score. The hypothesis was
rejected in terms of the correlation between the MJT score and the total PAQ score,
Affective scores, and Autonomy score for sophomore students. There was a significant
correlation for sophomores in PAQ total scores and MJT scores, $r(346) = 0.110, p < .05$;
in Affective subscale scores and MJT scores, $r(346) = 0.111, p < .05$; and in Autonomy
subscale scores, $r(346) = 0.139, p < .01$. Table 25 reports these findings.

**Age group.** H4d: There was no difference in terms of the correlation of perceived
parental attachment and moral judgment competence for students in different age groups.
The hypothesis was not rejected for all PAQ scores for 20-21, 22-23, and 24-25 year old
students, and for the 18-19 year old students in the total PAQ score, the Affective
subscale score, and the Support subscale score. The hypothesis was rejected in terms of
the correlation between the MJT score and the Autonomy score for students aged 18-19.
There was a significant correlation in Autonomy scores and MJT scores for 18-19 year
olds, $r(462) = 0.097, p < .05$. Table 26 reports these findings.

**Summary.** Positive correlations between the variables in the demographic groups
were found. Non-Caucasians showed a positive correlation between MJT scores and
Parental Fostering of Autonomy. Sophomores showed a positive correlation between
MJT scores and Total PAQ score, Affective Quality of Attachment, and Parental
Fostering of Autonomy. Students aged 18-19 also showed a positive relationship between
MJT scores and Parental Fostering of Autonomy.
Table 26

*Correlations Between PAQ Scales and MJT Scores by Age Group*

<table>
<thead>
<tr>
<th></th>
<th>PAQ Total</th>
<th>Affective</th>
<th>Autonomy</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>Sig.</td>
<td>N</td>
<td>Pearson Correlation</td>
</tr>
<tr>
<td></td>
<td>0.084</td>
<td>0.070</td>
<td>463</td>
<td>0.097*</td>
</tr>
<tr>
<td></td>
<td>-0.006</td>
<td>0.893</td>
<td>524</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>-0.052</td>
<td>0.442</td>
<td>218</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>-0.033</td>
<td>0.790</td>
<td>67</td>
<td>0.123</td>
</tr>
</tbody>
</table>

* *p < .05

**Summary of Findings**

This study determined that overall, perceived parental attachment in Millennial generation college students did not correlate with moral judgment competence. The only significant findings between the two variables are based on demographic characteristics.

**Gender**

No significant differences were found between males and females on the Moral Judgment Test. Significant differences were found between males and females in the
Parental Role in Providing Emotional Support of the Parental Attachment Questionnaire (PAQ), with females scoring higher than males. No other significant differences were found in the total PAQ score or the Affective or Autonomy subscales between genders. There was no significant correlation between the Moral Judgment Test, the Parental Attachment Questionnaire, or any PAQ subscales for either males or females.

**Ethnicity**

No significant differences were found between Caucasians and non-Caucasians on the Moral Judgment Test. Caucasians scored significantly higher than non-Caucasians on the PAQ total score and the Affective Quality of Attachment and the Parental Fostering of Autonomy subscales, but not the Parental Role in Providing Emotional Support subscale. There was no significant correlation between the Moral Judgment Test, the Parental Attachment Questionnaire, or any PAQ subscales for Caucasians. There was a significant correlation between the Moral Judgment Test and the PAQ Parental Fostering of Autonomy subscale for non-Caucasians, but no significant findings for other PAQ scores.

**Class Standing**

No significant differences were found between students of different class standings on the Moral Judgment Test. Freshmen scored significantly lower than both juniors and seniors on the Parental Fostering of Autonomy subscale. There were no other significant differences between students by class year in the total PAQ score, the Affective Quality of Attachment subscale, or the Parental Role in Providing Emotional Support subscale. There was no significant correlation between the Moral Judgment Test,
the Parental Attachment Questionnaire, or any PAQ subscale for freshmen, juniors or seniors. There was as significant correlation between the Moral Judgment Test, total PAQ score, Parental Fostering of Autonomy subscale, and Affective Quality of Attachment subscale for sophomores, but no significant finding for the Parental Role in Providing Emotional Support for sophomores.

**Age Group**

No significant differences were found between students of different age groups on the Moral Judgment Test. Students aged 18-19 scored significantly lower than both students aged 22-23 and 24-25 on the Parental Fostering of Autonomy subscale, but they scored higher than students aged 24-25 on the Parental Role in Providing Emotional Support. There were no other significant differences between students by class age in the total PAQ score or the Affective Quality of Attachment subscale. There was no significant correlation between the Moral Judgment Test, the Parental Attachment Questionnaire, or any PAQ subscale for students aged 20-21, 22-23, or 23-24. There was as significant correlation between the Moral Judgment Test and Parental Fostering of Autonomy subscale for students aged 18-19, but no significant finding for any other PAQ score or subscale for this group.

The study determined that there was a not a correlation between the constructs of perceived parental attachment and demonstrated moral judgment competency in the populations studied. However, findings based on various demographic characteristics add to the literature on moral development and parental attachment and point out areas in which groups of students may require different programming in order to maximize their
potential moral development. The next chapter provides an overview of these findings, their significance, and recommendations for practice and future research.
Chapter 5

Discussion & Implications

Summary of Study

Theorists have speculated that Millennials might progress through the cognitive-structural models of moral development differently than previous generations (Strange, 2004). With their acceptance of authority, convention, and structure, Millennials may not advance through the stages predicted by cognitive developmental models suggested by theorists. These schemas, such as Kohlberg’s (1976) theory of moral development, require individuals to shift from accepting authoritarian views to making their own meaning of the world. Millennials communicate more with their parents, have the expectation of parent intercession in their problems, and rely on their parent’s advice (National Survey of Student Engagement, 2007) leading researchers to believe that these adult children are closer to their parents more than any other generation (Howe & Strauss, 2007). There is a dearth of research on how the concept of perceived parental attachment impacts the ability of college students to progress as expected through suggested stages of moral development. An understanding of what impact parental attachment has, if any, on how Millennial generation college students develop morally can help settle this controversy and assist student development theorists and higher education administrators in the revision and development of theory, programs, and services.

This study was conducted to determine if there was a correlation between parental attachment and moral judgment competence of college students in the context of their
Millennial generation characteristics. This question was examined by measuring student’s perceived parental attachment with the Parental Attachment Questionnaire (PAQ) and measuring their percentage of demonstrated moral judgment competence using the Moral Judgment Test (MJT). In addition to exploring the overall influence, the study sought to determine if there were significant differences in various groups by demographic characteristics.

**Sample and Procedure**

Data were collected from undergraduates aged 18-25 from two campuses of a major university system in the northeastern United States. Due to a typically low response rate among college students, the entire population of 6,091 students was surveyed. Low response rates on surveys administered to college students are not uncommon so Dillman’s (2000) method of survey implementation of five contacts, adapted for an on-line environment, was used. A pre-notice was e-mailed to all the students. The second contact, also by e-mail, contained a link to the Waiver of Informed Consent and to the survey. The third contact was a reminder/thank you e-mail. The fourth e-mail was another reminder and the final e-mail was another request to complete the survey. Using commercially available software, Zoomerang®, the respondents were asked to complete the instruments. The response rate was 20.88% (1272 usable responses).

The overall population was comprised of 41% females and 59% males but respondents were 45% females and 55% males. Males responded at a lower rate than females. Of the total population surveyed, 23% of females who were sent the survey responded and 19% of males who were surveyed responded.
Racial and ethnic data were not available for the population, but based on the total enrollment of the campuses (including students under and over 18-25 age range specified by this study), 19% of Caucasians responded and 20% of non-Caucasians responded.

The overall population was comprised of 18-19 year-old students (44%), 20-21 year-old students (36%), 22-23 year-old students (16%) and 24-25 year-old students (5%). Response levels were (a) 18-19, 36%; (b) 20-21, 41%; (c) 22-23, 17%; and (d) 24-25, 5%. Thus, 18-19 year-olds responded at a lower level but 20-21 year-olds responded at a higher level than the total population. Of the group surveyed, 17% of 18-19 year olds responded, 24% of 20-21 year olds responded, 23% of 22-23 year olds responded, and 23% of 24-25 year olds responded.

Response rates by class were (a) Freshman responded at an 18% level, (b) Sophomores at a 24% level, (c) Juniors at a 23% level, and (d) Seniors at a 23% level.

**Instruments**

The Parental Attachment Questionnaire (PAQ) was used to measure parental attachment. The instrument is comprised of 55 items yielding an overall parental attachment score and three sub scores: Affective Quality of Attachment, Parental Fostering of Autonomy, and Parental Role in Providing Emotional Support. Moral judgment competence was measured using the Moral Judgment Test (MJT), a multiple choice instrument consisting of two hypothetical situations and a series of questions and rating items to assess subjects’ attitudes towards the six stages of Kohlberg’s theory of moral development. Results are converted in a C score which represents the subjects’
moral judgment competence. A demographic questionnaire was designed to collect students’ information regarding age, class standing, ethnicity and gender.

**Data Analysis**

Quantitative data analysis, using the results from the PAQ, MJT, and demographic questionnaire, was conducted to answer the research questions in this study. Data were analyzed using SPSS software.

The researcher conducted a wave analysis. Four waves were identified: (a) between survey e-mail and first reminder, (b) between first and second reminders, (c) between second the third reminders, and (d) between third and final reminders. An ANOVA was used to compare scores on the scores of the MJT and PAQ for each wave. A Tukey HSD post-hoc procedure was conducted to determine specific waves with significant differences. Another ANOVA was conducted to determine if significant differences existed by demographic characteristics in each wave. Again, a Tukey HSD post-hoc procedure was conducted to determine which characteristics had significant differences by wave.

A Pearson product-moment correlation was used to determine the correlations between all scores on the PAQ and the MJT score. T-tests were used to determine if significant differences existed between females and males and Caucasian and non-Caucasians for all scores on both the PAQ and the MJT. One-way ANOVAs were used to ascertain significant differences between the scores on the PAQ and MJT for students by class standing and by age.
Using Pearson product-moment correlations, scores on the PAQ and MJT were calculated for each gender and results were compared to determine differences. The same analysis was used for Caucasians and non-Caucasians, students by class year and students by age.

**Limitations**

The researcher recognized several limitations to this study. The survey yielded a response rate of 20.88% which may have led to possible nonresponse bias. A wave analysis indicated that nonresponders may not share the same characteristics as those who responded. Male and non-Caucasian students were more likely to be nonresponders. Nonresponse bias is described by Creswell (2008) as “response bias [also called nonresponse bias] occurs in survey research when the responses do not accurately reflect the views of the sample and the population” (p. 403). Using a wave analysis, it was determined that nonresponse bias may have been present in this study. Due to the low response rate and the results of the wave analysis, the findings of this study may not be able to be generalized to the entire population studied, but limited only to the respondents.

Due to the correlation design of the study, causal relationships cannot be inferred from statistically significant results. Since data were collected from only two institutions, findings are limited to these populations only.

This study was cross-sectional rather than longitudinal so it cannot be determined whether positive parental attachment leads to more advanced moral judgment competence and vice versa.
The study collected data using self report so recall bias may have skewed data, faking of responses, and response bias by subjects impacting results. Additionally, demographic variables were collected from subjects’ self-reports and may not be accurate.

**Summary of Findings**

The following results were found:

- Parental attachment is not correlated to moral judgment competence in Millennial generation college students.

- The mean moral judgment competency score for the institutions studied was 17.2, falling in the low range. According to Lind (2008), moral judgment competency scores can be thought of as very low (1-9), low (10-19), medium (20-29), high (30-39), very high (40-49), and extraordinary high (above 50).

- Female students perceive their parents or caregivers as providing a higher level of emotional support.

- Caucasian students perceive their parents or caregivers as providing higher levels of total parental attachment, affective quality of attachment, and fostering autonomy than non-Caucasian students.

- Freshman students perceived their parents or caregivers fostering autonomy less than the junior and senior level students.

- Younger students (18-19) perceived their parents or caregivers fostering autonomy less than the older students (22-23 and 24-25).
• Younger students (18-19) perceive their parents or caregivers have a greater role in providing emotional support than older students (24-25).
• The correlation between moral competency and parental fostering of autonomy was significant for non-Caucasians.
• The correlation between moral competency and total parental attachment, affective quality of attachment, and fostering autonomy was significant for sophomore students.
• The correlation between moral competency and parental fostering of autonomy was significant for students aged 18-19.

Discussion of Findings

Findings of this study answer the following research questions.

Research Question 1: What is the correlation between students’ perceived parental attachment and moral judgment competence?

This study found no significant correlation between parental attachment and moral judgment competence in the populations studied. This finding harmonized with Kohlberg’s (1969) theory that parents have less influence on moral development as children reach adolescence and early adulthood. This finding also concurs with the results of a similar study by Rogers (1994) using two different instruments to measure the same variables. Rogers’ sample was small and homogenous, but the current study’s similar finding with a larger and more diverse sample further cements the lack of influence parents have on college students’ moral development. These findings also coincided with a third study comparing moral development to parental attachment. Van Ijzendoorn &
Zwart-Woudstra (1995), using yet another set of instruments to measure the variables, found no relationship between moral reasoning and parental attachment.

This study attempted to quantitatively analyze Strange’s (2004) speculation that Millennials progress through the cognitive-structural models of moral development differently than previous generations due to the unique characteristics of the generation, including their attachment to parents. When comparing the findings of this research with that of research on Generation X college students (as described above), this speculation was refuted. Millennial generation students studied in this research project seemed to follow the same path as the Generation X students studied previously.

Research Question 2: What is the students’ demonstrated moral judgment competence, and are there differences between males and females, Caucasians and non-Caucasians, students by class standing, and age?

According to Lind (2008), MJT mean scores should be converted to percentages that range from 1-100%. These percentages, or C scores, can be thought of as very low (1-9), low (10-19), medium (20-29), high (30-39), very high (40-49), and extraordinary high (above 50). In the population studied, the mean moral judgment competence score fell in the low range. The student’s mean C score was 17.16%. While no normative data exists, this is a surprising finding as most studies using the Moral Judgment Test found college students to score in the medium range. For example, in a study of Italian college students with an average age of 24.17, the control group scored 23.08% on the first test and the experimental group scored 26.31% (Comunian & Gielen, 2006), both clearly in the medium range. Another study of Dutch college students with an average age of 20
had C scores of 33.48 (Duriez & Soenens, 2006), falling into the high range. A study of American college students aged 18-22 had a mean MJT score of 26.46, again in the medium range (Kim, 2006). One reason for MJT scores in this study to be lower than comparable populations could be that the MJT has not been extensively used on American college students. More research is needed using the MJT on similar populations to test this theory.

College students typically score in the mid-range or higher on other measurements of moral development as well. The most widely used instrument to measure moral development in college students in the Defining Issues Test (King & Mayhew, 2002). The composite DIT score for college students is 42.3 (Rest, 1979b). DIT scores can range from 0-95, with 35 as an average (Rest & Narvaez, 1997).

The reason MJT scores in this study are in a lower range than DIT scores for similar populations could be attributed to one of the benefits of using the MJT instrument. The MJT empirically tests the connection between moral development and social behavior (Lind, 2008). Unlike the DIT, the MJT places emphasis on moral tasks rather than just moral attitudes and allows the subject less ability to fake their scores upward.

In terms of demographic variables, there were no significant differences between males and females. This was in line with most findings on MJT scores (see Slova´čikova´ & Slova´čiék, 2007). According to most studies using the Defining Issues Test, men and woman have demonstrated the same level of moral reasoning as well (Pearson & Bruess,
A 1984 review of studies revealed that women score lower than men on the DIT only if educational level is not controlled (see Walker, 1984).

There were also no significant differences between Caucasians and non-Caucasians. The MJT has been used in many different cultures, but it has not been used extensively on underrepresented groups within the United States. The Defining Issues Test also provides little comparative data. King and Mayhew (2002) found only two studies out of 172 using the DIT that specifically intended to study the difference in moral development by college student ethnicity. Only three studies included race or ethnicity as an auxiliary research question. Thus, “research investigating the relationship between race and ethnicity and moral judgment measured by the DIT is underdeveloped, and no clear pattern of results is yet available” (King & Mayhew, 2002, p. 251).

Students of different class standings and of different age groups also showed no significant differences in moral judgment competence. In studies using different instruments, namely the Defining Issues Test, moral reasoning tends to increase with age and level of education (Rest, 1979a; Narvaez, 1998). Again, these differences could be attributed to the type of moral development the instrument is intended to measure. The MJT measured not only attitudes but the propensity of the subject to actually act on this attitude, whereas the other instruments tended to focus on mainly moral attitudes rather than moral action.

Research Question 3: What are the students’ overall scores and the scores on the subscales of the Parental Attachment Questionnaire (PAQ), and are there differences
between males and females, Caucasians and non-Caucasians, students by class standing, and age?

The mean PAQ total score was 194.15 (26.42). In other studies using the PAQ on college students, the total score ranged from 171.13 to 210.40 (M. Kenny, personal communication, May 29, 2008). Mean scores on the Affective Quality of Attachment subscale was 97.72 (14.34). In data provided by Kenny (personal communication, May 29, 2008), the scores on this scale ranged from 89.97 to 104.06. Mean scores for the Parental Fostering of Autonomy subscale was 50.46 (7.88). Comparative data shows scores on this scale in the range of 49.94 to 55.44 (M. Kenny, personal communication, May 29, 2008). Finally, mean scores for the Parental Role in Providing Emotional Support subscale was 45.97 (8.21). Kenny’s data (personal communication, May 29, 2008), shows scores on this scale to range from 40.92 to 56.33.

Findings in this research project varied between the populations studied in terms of demographic characteristics. Females reported a higher level of emotional support from parents. This finding is consistent with Kenny’s (1994) research in which she studied students enrolled in a post high school program and also her research with college seniors (Kenny, 1990). She found that women described their parents as providing higher levels of emotional support than their male counterparts. No other differences between males and females were found. These findings are illustrated in Figure 2.

There has been little research on parental attachment by race or ethnicity. This study found that the Caucasian students studied perceive their total parental attachment
higher than non-Caucasians. They also perceive a higher level of affective quality of the attachment and that their parents or primary caregivers foster higher levels of autonomy.

Figure 2. PAQ scores for females and males.

than non-Caucasians. These findings are illustrated in Figure 3. Hinderlie and Kenny (2002) found that a sample of African-American students were indistinguishable from Caucasian students in terms of parental attachment and college adjustment. In this study non-Caucasian students included those of African Americans, Hispanic, Asian and Native American backgrounds. The number of African-American students in the sample was not high enough to draw conclusions regarding differences in parental attachment for this group alone in order to compare the results to Hinderlie and Kenny’s (2002) research.
No differences were found in total PAQ score, Affective Quality of Attachment or the Parental Role in Providing Emotional Support by class standing. However, the research found that freshmen students scored lower on the Parental Fostering of Autonomy (see Figure 4). By the same token, younger students (18-19) rated their parents lower on fostering autonomy than older students, but higher on parental role in providing emotional support (see Figure 5). There were no other differences in age. These findings differ from Lapsley et al.’s (1990) research that found no difference in attachment between freshman and senior students. Intuitively, one would surmise that in the beginning of their college career, parents would provide more emotional support, and as students mature, the parent is more likely to encourage autonomy.

**Research Question 4: Are there differences in the relationship between students’ overall percentage of demonstrated moral judgment competence and**
perceived parental attachment between the following groups: males and females;

Caucasians and non-Caucasians; students by class standing; and age?

No significant correlation between moral judgment competence and total parental attachment, affective quality of attachment, parental role in providing emotional support, or parental fostering of autonomy was found in males or in females.

Figure 4. PAQ scores for students by class standing.

A significant correlation between moral judgment competence and parental fostering of autonomy was found for non-Caucasian students. This finding adds to the literature on both parental attachment and moral judgment competence as there was a significant dearth of research findings for non-Caucasian college students in these areas. No other findings revealed any relationship between moral competency and the parental attachment scales studied in either Caucasians or non-Caucasians.
In terms of class standing, sophomore students were the only group to reveal significant correlations between various parental attachment scales and moral judgment competence. For sophomores, there was a positive relationship between total parental attachment and moral judgment competence, between parental fostering of autonomy and moral judgment competence, and between affective quality of attachment and moral judgment competence. Freshmen, juniors, and seniors did not have any significant correlations between the two constructs.

There was one correlation between moral judgment competence and parental attachment in the different age groups. Students aged 18-19 had a significant correlation between moral judgment competence and parental fostering of autonomy. No other
findings were present in this population. The findings were interesting as one might expect younger students to reveal more of an impact of parents on their moral judgment competence. According to this study, however, this is not the case except perhaps in the area of parental fostering of autonomy.

Conclusions

The results of this study were in agreement with numerous theories showing a bias against the role parents play in the moral development of their children (Walker & Henning, 1999; Walker & Taylor, 1991). They also agreed with speculation by Waters et al. (2005) that secure parental attachment did not necessarily equate to positive developments in the affective domain of adolescence and young adults.

This study did not show an overall influence of parental attachment on the moral development of Millennial generation college students. This finding corresponded with Mackay’s (1997) observation that parents of Millennials failed to instill a clear framework of morality into their children. However, it is continually observed that Millennials relied on their parents more than any previous generation, even into the college years (Howe & Strauss, 2003). Kohlberg (1969) theorized that parents are important in instilling a moral foundation in their children, but their influence in moral development decreased as their children enter adulthood. This study provided evidence that this observation was correct, despite the unique characteristics of the Millennial Generation.

Mackay (1997) also suggested that moral absolutes were unknown to Millennials and that they were unencumbered by pre-conceived notions and the allure of law and
order. If true, these characteristics made them more likely to score higher on instruments measuring moral reasoning and action. On the other hand, many Millennials were searching for meaning in their lives (Huntley, 2006). Market researchers called Millennials “Generation Paradox” (p. 167) due to their focus on both material comforts and spiritual matters. These characteristics indicated that Millennials were still searching for answers and that their moral judgment competence could be far from Kohlberg’s post-conventional levels. The findings from this study provided support to the latter observation, with the populations studied scoring very low on moral judgment competency as measured by the Moral Judgment Test.

**Recommendations for Future Practice**

Strange (2004) hypothesized that current college student development models may need to change to accommodate the Millenial generation’s unique characteristics, but the findings from this study indicate that this is not necessary where the cognitive structural theory of moral development is concerned. The relationship Millennial generation college students have with their parents does not positively or negatively impact their ability to develop morally through their college years.

Higher education administrators are expected to work with parents on a greater level than ever before (Levin Coburn, 2006). Parents of Millennials want to be involved, but higher education administrators face the challenge of capturing this enthusiasm and channeling their efforts in a positive manner. Since students’ moral development in this study did not correlate with parental attachment, higher education administrators can
worry less about parental interference negatively impacting college students’ ability to progress through moral development models.

These findings do not mean, however, that higher education administrators can dismiss their concerns that parental attachment might impact student development in other domains. More research is needed on other aspects of student development to make this conclusion. Also, it should be noted that different demographic groups did indicate a correlation between moral judgment competency and elements of parental attachment. Non-Caucasians, sophomore students, and students aged 18-19 years may need guidance and programming to overcome any detrimental aspects of parental attachment to their moral judgment competence.

There was evidence that Caucasian students and female students have greater levels of parental attachment than their counterparts. This may indicate a need for colleges and universities to develop programs and services to nurture this attachment in females and Caucasians, as well as identify strategies for developing parental attachment in males and non-Caucasians. Younger freshman students have reduced levels of Parental Fostering of Autonomy, indicating a need for programs and services supporting 18-19 year-old freshman students in developing independence from their parents. In general, programs and services are needed to enhance the understanding of the changing nature of their relationship that the students have with their parents.

**Recommendations for Future Research**

Research often causes more questions than answers. The findings from this research lead to several suggestions. First, future research using qualitative, mixed
method, or other methodology is recommended to increase response rates. One suggestion is to use social media networks in gathering data from Millennial Generation subjects.

Future research is recommended to investigate peer and/or societal influence on Millennials to test Kohlberg’s (1969) theory that these two elements influence moral development more highly than parental attachment.

The correlation between moral judgment competence and parental attachment, specifically Parental Foster of Autonomy, in non-Caucasians was significant in this study. Further research is recommended with a larger sample of non-Caucasian students to provide additional information on how parental attachment is related to moral development among non-Caucasian students of various races and ethnicities. Research based on race and/or ethnicity may lead to additional insight on cultural influences on both parental attachment and moral development. In addition, research is recommended on students from other countries in the area of parental attachment and moral development.

The findings of this research revealed that sophomore students showed a significant correlation between moral judgment competence and parental attachment. The sophomore year of college is typically neglected in research despite the evidence that sophomores dropped out of college at a higher rate than freshmen students (Lipka, 2006). More research on sophomore students’ moral development and attachment to parents could clarify these initial findings and add to the literature about this subject.
Students at two small to mid-sized regional campuses of a public institution were studied. Similar research with students at different types of institutions is recommended. Research that includes students’ collegiate housing status (on-campus residence hall, off-campus housing, or commuting from parents’ home) and students’ majors or fields of study is recommended to determine the possible influences on moral development.

Data were collected with Madigan’s research on parental attachment and spiritual development using the same respondents. Therefore, research on the relationship between spiritual and moral development using the existing data set could provide additional insight into both of these important developmental tasks.

Research using data collected from both students and their parents is recommended to provide additional insight on how each perceives the child-parent relationship and if the moral judgment competence of the parents is related to the moral judgment competence of the students. In addition, more research on characteristics of Generation X parents of Millennial Generation children is recommended.

Finally, an in-depth, longitudinal study on Millennial Generation college students is needed to investigate a causal link between parental attachment and moral judgment competence.
References


(Eds.), *Moral development and the social environment: Studies in the philosophy and psychology of moral judgment and education* (pp. 173-192). Chicago: Precedent.


J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 520-554). NY: Guilford.


Appendix A

Pre-Survey E-mail
Dear <Name>,

In a few days, you will receive an e-mail request to fill out a web questionnaire. The questionnaire is for an important research project being conducted for our dissertations. We are doctoral students at the University of Nebraska at Lincoln, and we must complete this research project in order to graduate.

The questionnaire concerns the experiences of undergraduate students with their parents and how their relationships influence their decision-making skills and thoughts about spiritual matters. The study is important because it will help the administration, faculty and staff at <institution> to better understand your needs and will assist them in providing services to you, your parents, and other students and their parents.

Thank you in advance for your time and consideration. Your unique experiences will provide much useful information for this study. We recognize that participation in this research project is voluntary, and we very much appreciate your assistance. It is only with the generous help of students like you that our research can be successful.

This research is being conducted in collaboration with <institution>.

Sincerely,

Deidra Graves Stephens
Student
University of Nebraska at Lincoln
512-788-3327
deidra.stephens@mccombs.utexas.edu

Mary-Ellen Madigan
Student
University of Nebraska at Lincoln
814-898-6336
Mea1@psu.edu

P.S. As a way of saying thanks for your participation, you will be entered into a drawing for one of several Amazon.com gift certificates after you successfully submit your web survey.
Appendix B

Survey E-mail
Dear <Name>,

We are writing to request your help with an important research project being conducted for our dissertations at the University of Nebraska at Lincoln. The study is part of an effort to learn more about undergraduate students’ relationships with their parents. As a student, we are sure you understand how important it is for us to get your response back for our research.

We are contacting all <institution> students to ask them about how their relationships with their parents influence their decision-making skills and thoughts about spiritual matters.

The study is important because it will help the administration, faculty and staff at <institution> to better understand your needs and will assist them in providing services to you, your parents, and other students and their parents.

The questionnaire will take about 20 minutes to complete. As a token of appreciation for your participation, you will be automatically entered into a prize drawing for one of five $100 Amazon.com gift certificates upon completion of the web survey. Winners will be contacted via e-mail after the data collection period ends.

Your answers are completely confidential and will be released only as summaries in which no individual’s answers can be identified. When you enter the survey, you will be asked to type in a number on the web survey. This is to help us know when you return your completed questionnaire so that we can delete your name from the mailing list and enter your name into the prize drawing. Your name will never be connected to your answers in any way.

This survey is voluntary. However, you can help us very much by taking a few minutes to share your thoughts. If for some reason you choose not to respond, please let us know by entering the web survey, inserting your number, and submitting the blank questionnaire. Please read the attached Informed Consent Form. By clicking the survey link you are verifying your consent to participate in this research.

To begin the survey, please click on the following link: <link>. You will be asked to enter in a number. Please enter in the following number: <#####>.

If you have any questions or comments about this study, please feel free to contact us or our advisors using the information below. This research is being conducted in collaboration with <institution>. 
Thank you very much for helping with this important study.

Sincerely,

Deidra Graves Stephens
Student
University of Nebraska Lincoln
512-788-3327
deidra.stephens@mccombs.utexas.edu

Mary-Ellen Madigan
Student
University of Nebraska Lincoln
814-898-6336
MEA1@psu.edu

Dr. Ronald Joekel
Faculty Advisor
University of Nebraska at Lincoln
402-472-0971
rjoekel2@unl.edu

Dr. Richard Hoover
Faculty Advisor
University of Nebraska at Lincoln
402-472-3058
rhoover2@unl.edu
Appendix C

Survey Instrument
INFORMED CONSENT FORM

Identification of Project: The influence of parental attachment on spiritual development and decision-making in college students.

Purpose of the Research: The purpose of this research is to determine if college students' relationships with their parents influence their spiritual lives and how they make decisions.

Procedures: You will be asked to complete a survey that will ask you questions about your relationship with your parents, your spiritual beliefs, and making decisions. It will take approximately 20 minutes to complete the survey.

Risks and/or Discomforts: There are no known risks or associated with this research.

Benefits: You may find it helpful to think about your relationship with your parents and also how you feel about spiritual matters. The information gained from this study may help college administrators, staff, and faculty better understand college students.

Confidentiality: Your answers are completely confidential and will be released only as summaries in which no individual's answers can be identified. When you enter the survey, you will be asked to type in a code on the survey web page. This is to help us know when you return your completed questionnaire so that we can delete your name from the mailing list and enter your name into our prize drawing. Your name will never be connected to your answers in any way. The data will be stored in a password-protected file on a secure server and will only be seen by the investigators during the study and for three years after the study is complete. The information obtained in this study may be published in scholarly journals or presented at scholarly meetings but the data will be reported as aggregated data. Your confidentiality will be kept to the degree permitted by the technology used. No guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Compensation: By participating in this research you will be eligible to be entered into a drawing for one of five $100 gift cards from Amazon.com. The name and PSU User ID for winners of the gift cards will need to be forwarded to Penn State's Accounting Department for tax purposes.

Opportunity to Ask Questions: You may ask any questions concerning this research and have those questions answered before agreeing to participate in or during the study. Or you may call Mary-Ellen Madigan at any time, office phone, 866-374-3378 (toll-free), or by email MM41@psu.edu; Deidra Graves Stephens, 512-788-3327 or by email deidra.stephens@mcgimc.edu or Dr. Richard Hoover, (402)472-3068 or by email rhouzer2@huskers.edu. If you have questions concerning your rights as a research subject that have not been answered by the investigator or to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board, telephone (402) 472-6463.

Freedom to Withdraw: Your decision to be in this research is voluntary. You can stop at any time. You do not have to answer any questions if you do not want to answer. Refusal to take part in or withdrawing from this study will involve no penalty or loss of benefits you would receive otherwise.

Consent: You are voluntarily making a decision whether or not to participate in this research study. Taking the survey certifies that you have decided to participate having read and understood the information presented. You may print a copy of this consent for your records. Completion and submission of the survey implies your consent to participate in this research.

This research is not affiliated with Penn State University except that one of the researchers is a Penn State employee. Participants must be 18 years of age or older.

Names and Phone number and email of investigator

Mary-Ellen Madigan, Principal Investigator
4701 College Drive, Eric, PA 16563
Phone: 866-374-3378 or 814-898-6355
MM41@psu.edu

Deidra Graves Stephens, Principal Investigator
1 University Station, 66004, Austin, TX 78712
Phone: 512-788-3327
deidra.stephens@mcgimc.edu

Dr. Richard Hoover, Supervisory Investigator
110 VEA, University of Nebraska-Lincoln, NE 68588
Phone: 402-472-3068
rhouzer2@huskers.edu
Parental Attachment, Spiritual Development & Opinions About Social Problems

Thank you for taking this survey and assisting us with our research. With your permission, we will contact you to gather your thoughts about this survey. Your input will help us as we design our final survey instrument.

1. Please enter the survey number which was sent to you in the email you received.

Parental Attachment, Spiritual Development & Opinions About Social Problems

2. What is your current class standing?

3. What is your age?

4. What is your gender?

5. What is your race/ethnicity?
Parental Attachment, Spiritual Development & Opinions About Social Problems

OPINIONS ABOUT SOCIAL PROBLEMS

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. Your responses will be analyzed to find the average for the whole group, and no one will see your individual answers.

In this questionnaire, you will be asked to give your opinions about several stories.

(c) 1977-2002 by George Lind, http://www.uni-konstanz.de/ag-moral

6 First Story

Due to some seemingly unfounded dismissals, some factory workers suspect managers of eavesdropping on their employees through an intercom and using this information against them. The manager officially and emphatically deny this accusation. The union declares that it will only take steps against the company when proof has been found that confirms these suspicions. Two workers then break into the administrative offices and take tape transcripts that prove the allegation of eavesdropping.

Would you disagree or agree with the workers’ behavior?

I strongly disagree I strongly agree

1 2 3 4 5 6 7

7 How acceptable do you find the following arguments in favor of the two workers’ behavior? Suppose someone argued they were right...

1 I strongly reject 2 3 4 5 6 7 8 9 I strongly accept

because they didn’t cause much damage to the company

1 2 3 4 5 6 7 8 9

because due to the company’s disregard for the law, the means used by the two workers were permissible to restore law and order

because most of the workers would approve of their deed and many of them would be happy about it

because trust between people and individual dignity count more than the firm’s internal regulations

because the company had committed an injustice first, the two workers were justified in breaking into the offices

because the two workers saw no legal means of revealing the company’s misuse of confidence, and therefore chose what they considered the lesser evil

---

8 How acceptable do you find the following arguments against the two workers’ behavior? Suppose someone argued they were wrong...

1 strongly reject 2 3 4 5 6 7 8 9 strongly accept

because we would endanger law and order in society if everyone acted as the two workers did

because one must not violate such a basic right of property ownership and take the law into one’s own hands, unless some universal moral principle justifies doing so

because risking dismissal from the company on behalf of other people is unwise

because the two should have run through the legal channels at their disposal and not committed a serious violation of the law

because one doesn’t steal and commit burglary if one wants to be considered a decent and honest person

because the dismissals of the other employees did not affect them and thus they had no reason to steal the transcripts

---

Parental Attachment, Spiritual Development & Opinions About Social Problems

9  Doctor’s Dilemma

A woman had cancer and she had no hope being saved. She was in terrible pain and so weakened that a large dose of a painkiller such as morphine would have caused her death. During a temporary period of improvement, she begged the doctor to give her enough morphine to kill her. She said she could no longer endure the pain and would be dead in a few weeks anyway. The doctor complied with her wish.

Do you disagree or agree with the doctor’s behavior?

<table>
<thead>
<tr>
<th>I strongly disagree</th>
<th>I strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

10  How acceptable do you find the following arguments in favor of the doctor? Suppose someone said he acted right...

1  I strongly reject

because the doctor had to act according to his conscience. The woman’s condition justified an exception to the moral obligation to preserve life.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

because the doctor was the only one who could fulfill the woman’s wish; respect for her wish made him act as he did

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

because the doctor only did what the woman talked him into doing. He need not worry about the consequences

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

because the woman would have died anyway and it didn’t take much effort for him to give her an overdose of painkiller

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

because the doctor didn’t really break a law. Nobody could have saved the woman and he only wanted to shorten her suffering

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

because most of his fellow doctors would presumably have done the same in a similar situation

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11  How acceptable do you find the following arguments against the doctor? Suppose someone said that he acted wrong...

<table>
<thead>
<tr>
<th>1</th>
<th>9</th>
</tr>
</thead>
</table>

Parental Attachment, Spiritual Development & Opinions About Social Problems

The following questions will ask you about your feelings on spiritual matters. Please choose the answer that best describes your level of agreement with the statement.

12 Please provide the answer that best describes your agreement with the following statements

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often feel strongly related to a power greater than myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My faith gives my life meaning and purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My faith is a way of life.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I often think about issues concerning my faith.

My faith is an important part of my individual identity.

My relationship to God or other supreme being is experienced as unconditional love.

My faith is often a deeply emotional experience.

I gain spiritual strength by trusting a higher power.

13 Please provide the answer that best describes your agreement with the following statements

| Strongly Agree | 6 |
| Strongly Disagree | 1 |
| Disagree | 2 |
| 3 |
| 4 |
| 5 |

My faith is often a deeply emotional experience.

I make a conscious effort to live in accordance with my spiritual values.

My faith enables me to experience forgiveness when I act against my moral conscience.

Sharing my faith with others is important for my spiritual growth.

My faith guides my whole approach to life.

I believe that there is only one true faith.

Ideas from faiths different from my own may increase my understanding of spiritual truth.

14 Please provide the answer that best describes your agreement with the following statements

| Strongly Agree | 6 |
| Strongly Disagree | 1 |
| Disagree | 2 |
| 3 |
| 4 |
| 5 |

One should not marry someone of a different faith.
I believe that the world is basically good.
1 2 3 4 5 6

Learning about different faiths is an important part of my spiritual development.
1 2 3 4 5 6

I feel a strong spiritual bond with all of humankind.
1 2 3 4 5 6

I never challenge the teachings of my faith.
1 2 3 4 5 6

My spiritual beliefs change as I encounter new ideas and experiences.
1 2 3 4 5 6

Persons of different faiths share a common spiritual bond.
1 2 3 4 5 6

I believe that the world is basically evil.
1 2 3 4 5 6

Survey Page 6

Parental Attachment, Spiritual Development & Opinions About Social Problems

The statements describe family relationships and the kinds of feelings and experiences frequently reported by young adults. Please respond to each item by filling in the number on a scale of 1 to 5 that best describes your parents or other primary caregiver, your relationship with them, and your experiences and feelings. Please provide a single rating to describe your parents or other primary caregiver and your relationship with them. If only one parent/caregiver is living, or if your parents/caregivers are divorced, respond with reference to your living parent/caregiver or the parent/caregiver with whom you feel closer.

15 In general, my parents/caregivers...

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at All</td>
<td>Somewhat</td>
<td>A Moderate Amount</td>
<td>Quite a Bit</td>
<td>Very Much</td>
</tr>
</tbody>
</table>

- Are persons I can count on to provide emotional support when I feel troubled.
  1 2 3 4 5

- Support my goals and interests.
  1 2 3 4 5

- Live in a different world.
  1 2 3 4 5

Zoomerang

Understand my problems and concerns.
1 2 3 4 5

Respect my privacy.
1 2 3 4 5

Restrict my freedom or independence.
1 2 3 4 5

16 In general, my parents/caregivers...

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are available to give me advice or guidance when I want it.
1 2 3 4 5

Take my opinions seriously.
1 2 3 4 5

Encourage me to make my own decisions.
1 2 3 4 5

Are critical of what I can do.
1 2 3 4 5

Impose their ideas and values on me.
1 2 3 4 5

Have given me as much attention as I have wanted
1 2 3 4 5

Are persons to whom I can express differences of opinion on important matters.
1 2 3 4 5

17 In general, my parents/caregivers...

<table>
<thead>
<tr>
<th></th>
<th>Not at All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are sensitive to my feelings and needs
1 2 3 4 5

Are disappointed in me.
1 2 3 4 5

Give me advice whether or not I want it.
1 2 3 4 5

Respect my judgment and decisions, even if different from what they would want.
1 2 3 4 5

Do things for me, which I could do for myself.
1 2 3 4 5

18. In general, my parents/caregivers...

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have no idea what I am feeling or thinking.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have provided me with the freedom to experiment and learn things on</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>my own.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are too busy or otherwise involved to help me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Have trust and confidence in me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Try to control my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Protect me from danger and difficulty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ignore what I have to say.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Parental Attachment, Spiritual Development & Opinions About Social Problems

19. During recent visits or time spent together, my parents/caregivers were persons...

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I looked forward to seeing:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>With whom I argued.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

With whom I felt relaxed and comfortable.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Who made me angry.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

I wanted to be with all the time.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Towards whom I felt cool and distant.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

20 During recent visits or time spent together, my parents/caregivers were persons...

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Who got on my nerves.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Who aroused feelings of guilt and anxiety.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

To whom I enjoyed telling about the things I have done and learned.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

For whom I felt a feeling of love.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

I tried to ignore.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

To whom I confided my most personal thoughts and feelings.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Whose company I enjoyed.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

I avoided telling about my experiences.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

21 Following time spent together, I leave my parents/caregivers...

<table>
<thead>
<tr>
<th>Not At All</th>
<th>Somewhat</th>
<th>A Moderate Amount</th>
<th>Quite a Bit</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

With warm and positive feelings.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

Feeling let down and disappointed by my family.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

22 When I have a serious problem or an important decision to make...

23 When I go to my parents/caregivers for help...

<table>
<thead>
<tr>
<th></th>
<th>1 Not At All</th>
<th>2 Somewhat</th>
<th>3 A Moderate Amount</th>
<th>4 Quite a Bit</th>
<th>5 Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel more confident in my ability to handle the problems on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I continue to feel unsure of myself.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel that I would have obtained more understanding and comfort from a friend.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I feel confident that things will work out as long as I follow my parent’s advice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I am disappointed with their response.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix D

First Follow-up E-mail
FIRST FOLLOW-UP E-MAIL

Dear <Name>,

Last week a questionnaire was e-mailed to you seeking information about your relationship with your parents and how it influences your decision-making skills and thoughts about spiritual matters.

If you have already completed and submitted the questionnaire, please accept our thanks. If not, please do so today. We recognize that participation in this research project is voluntary, but we are especially grateful for your help because it is only by asking students like you about your experiences that we can improve university services and programs.

If you did not receive a web link to the questionnaire or if our previous e-mail was misplaced, please click on this link to access the survey: <link>. You will be asked to enter in a number. Please enter in the following number: <#####>.

If you have any questions or comments about this study, please feel free to contact one of us using the information below. This research is being conducted in collaboration with <institution>.

Thank you very much for helping with this important study.

Sincerely,

Mary-Ellen Madigan
Student
University of Nebraska Lincoln
814-898-6336
MEA1@psu.edu

Dr. Richard Hoover
Faculty Advisor
University of Nebraska Lincoln
402-472-3058
rhuover2@unl.edu

Deidra Graves Stephens
Student
University of Nebraska Lincoln
512-788-3327
deidra.stephens@mccombs.utexas.edu

Dr. Ronald Joekel
Faculty Advisor
University of Nebraska Lincoln
402-472-0971
rjoekel2@unl.edu
Appendix E

Second Follow-up E-mail
SECOND FOLLOW-UP E-MAIL

Dear <Name>,

Several weeks ago we sent you a questionnaire asking about your thoughts about your relationship with your parents and how it influences your decision-making skills and thoughts about spiritual matters. To the best of our knowledge, we have not received your completed questionnaire.

The questionnaires that have been returned provide a wealth of information about the role parents play in the lives of college students.

We are writing to you again because of the importance that your questionnaire has for helping us get accurate results. We recognize that participation in this research project is voluntary, but it is important that everyone in the sample respond so that the results are truly representative of the entire population of undergraduate students at <institution>.

A few people have written to say that they should not have received the questionnaire because they are not students at <institution>. If this situation applies to you, please let us know by e-mailing one of us so that we can delete your name from the mailing list.

We hope that you will take a few moments to complete and return the questionnaire soon. To access the survey, please click on the following link: <link>. You will be asked to enter in a number. Please enter in the following number: <#####>.

If for some reason you choose not to respond, please let us know by entering the web survey, inserting your number, and submitting the blank questionnaire.

This research is being conducted in collaboration with <institution>.

Thank you very much for helping with this important study.

Sincerely,

Deidra Graves Stephens
Student
University of Nebraska Lincoln
512-788-3327
deidra.stephens@mccombs.utexas.edu

Dr. Ronald Joekel
Faculty Advisor
University of Nebraska Lincoln
402-472-0971
rjoekel2@unl.edu

Mary-Ellen Madigan
Student
University of Nebraska Lincoln
814-898-6336
MEA1@psu.edu

Dr. Richard Hoover
Faculty Advisor
University of Nebraska Lincoln
402-472-3058
rhoover2@unl.edu

P.S. Don’t forget that submission of your questionnaire enters your name into a drawing for one of five $100 Amazon.com gift cards!
Appendix F

Final Follow-up E-mail
FINAL FOLLOW-UP E-MAIL

Dear <Name>,

I hope your finals are going well, or better yet, over! We have contacted you several times requesting that you respond to a questionnaire asking about your relationship with your parents and how it influences your decision-making skills and thoughts about spiritual matters. Our records indicate that we have not received your completed questionnaire.

We recognize that participation in this research project is voluntary, but our study relies upon responses from students like you in order to be considered a valid and reliable research project. We are doctoral students at the University of Nebraska at Lincoln, and we must complete this project in order to graduate.

Please assist us by taking the time to complete and return the questionnaire soon. To access the survey, please click on the following link: <link>. You will be asked to enter in a number. Please enter in the following number: <#####>.

If for some reason you choose not to respond, please let us know by entering the web survey, inserting your number, and submitting the blank questionnaire.

To express our appreciation, we will enter your name into a drawing for one of five Amazon.com gift certificates upon submission of your questionnaire.

Thank you very much for helping with this important study.

This research is being conducted in collaboration with <institution>.

Sincerely,

Deidra Graves Stephens
Student
University of Nebraska Lincoln
512-788-3327
deidra.stephens@mccombs.utexas.edu

Dr. Ronald Joekel
Faculty Advisor
University of Nebraska Lincoln
402-472-0971
rjoekel2@unl.edu

Mary-Ellen Madigan
Student
University of Nebraska Lincoln
814-898-6336
MEA1@psu.edu

Dr. Richard Hoover
Faculty Advisor
University of Nebraska Lincoln
402-472-3058
rhoover2@unl.edu

P.S. Please feel free to contact one of us if you have questions, concerns or comments.
Appendix G

Permission to Use the PAQ
DEPARTMENT OF COUNSELING, DEVELOPMENTAL
PSYCHOLOGY, AND RESEARCH METHODS
Campion 307
(617)552-4030
Fax (617)552-8419

Dear Colleague:

You have my permission to reproduce and use the Parental Attachment Questionnaire for research purposes. Please send me a copy of your findings to include in the compendium of studies using the PAQ.

Sincerely,

Maureen Kenny, Ph.D.
Associate Professor
Department of Counseling, Developmental Psychology and Research Methods
Boston College
Appendix H

Permission to Use the SEI-R
PERMISSION TO USE THE SEI-R

via e-mail

To: Mary-Ellen Madigan <meal@psu.edu>
Subject: Re: SEI-R inquiry
From: vicky.genia@unlv.edu
Date: Thu, 27 Sep 2007 16:03:09 -0700

Yes you may use the instrument for your research. It sounds like an interesting project and I’d be interested in learning the results after the study is completed. Scoring is explained in the article but I’d be happy to answer specific questions if it is not clear.

Vicky Genia
Appendix I

Permission to Use the MJT
PERMISSION TO USE THE MJT

From: georg.lind@uni-konstanz.de [georg.lind@uni-konstanz.de]
Sent: Thursday, March 27, 2008 4:12 PM
To: Deidra Stephens
Subject: RE: MJT/MUT multiple language versions, scoring code

Dear Mrs. Stephens:

As is written on each copy of the MJT, this test is free for use for research and teaching in public institutions. For these persons no further permission is required. For other uses, a written application is necessary.

Best regards,
Georg Lind
Appendix J

Tukey HSD Post-hoc Procedure for

Gender Wave Analysis
Table 27

Tukey HSD Post-hoc Procedure for Gender Wave Analysis

<table>
<thead>
<tr>
<th>Scale</th>
<th>(I) Wave</th>
<th>(J) Wave</th>
<th>Mean Difference (I-J)</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1 2</td>
<td>-0.070</td>
<td>0.034</td>
<td>0.162</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>-0.064</td>
<td>0.051</td>
<td>0.591</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-0.114*</td>
<td>0.038</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 1</td>
<td>0.070</td>
<td>0.034</td>
<td>0.162</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.006</td>
<td>0.052</td>
<td>0.999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-0.044</td>
<td>0.039</td>
<td>0.665</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 1</td>
<td>0.064</td>
<td>0.051</td>
<td>0.591</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>-0.006</td>
<td>0.052</td>
<td>0.999</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>-0.050</td>
<td>0.054</td>
<td>0.795</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 1</td>
<td>0.114*</td>
<td>0.038</td>
<td>0.013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0.044</td>
<td>0.039</td>
<td>0.665</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0.050</td>
<td>0.054</td>
<td>0.795</td>
<td></td>
</tr>
</tbody>
</table>

*p < 0.05
Appendix K

Tukey HSD Post-hoc Procedure for

Ethnicity Wave Analysis
Table 28

*Tukey HSD Post-hoc Procedure for Ethnicity Wave Analysis*

<table>
<thead>
<tr>
<th>Scale</th>
<th>(I) Wave</th>
<th>(J) Wave</th>
<th>Mean Difference (I-J)</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td>1</td>
<td>2</td>
<td>0.023</td>
<td>0.028</td>
<td>0.829</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.098</td>
<td>0.042</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.094*</td>
<td>0.031</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1</td>
<td>-0.023</td>
<td>0.028</td>
<td>0.829</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.075</td>
<td>0.042</td>
<td>0.287</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>0.071</td>
<td>0.031</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1</td>
<td>-0.098</td>
<td>0.042</td>
<td>0.085</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>-0.075</td>
<td>0.042</td>
<td>0.287</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
<td>-0.004</td>
<td>0.044</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1</td>
<td>-0.094*</td>
<td>0.031</td>
<td>0.011</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
<td>-0.071</td>
<td>0.031</td>
<td>0.107</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
<td>0.004</td>
<td>0.044</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p< 0.05
Appendix L

Tukey HSD Post-hoc Procedure for Parental Fostering of Autonomy by Class Year
Table 29

*Tukey HSD Post-hoc Procedure for Parental Fostering of Autonomy by Class Year*

<table>
<thead>
<tr>
<th>Scale</th>
<th>(I) Year</th>
<th>(J) Year</th>
<th>Mean Difference (I-J)</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>Freshmen</td>
<td>Sophomores</td>
<td>-0.950</td>
<td>0.591</td>
<td>0.375</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Juniors</td>
<td>-2.033**</td>
<td>0.623</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seniors</td>
<td>-2.120**</td>
<td>0.624</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>Freshmen</td>
<td>0.950</td>
<td>0.591</td>
<td>0.375</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Juniors</td>
<td>-1.083</td>
<td>0.627</td>
<td>0.310</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seniors</td>
<td>-1.170</td>
<td>0.628</td>
<td>0.245</td>
</tr>
<tr>
<td></td>
<td>Juniors</td>
<td>Freshmen</td>
<td>2.033**</td>
<td>0.623</td>
<td>0.006</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sophomores</td>
<td>1.083</td>
<td>0.627</td>
<td>0.310</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seniors</td>
<td>-0.087</td>
<td>0.658</td>
<td>0.999</td>
</tr>
<tr>
<td></td>
<td>Seniors</td>
<td>Freshmen</td>
<td>2.120**</td>
<td>0.624</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sophomores</td>
<td>1.170</td>
<td>0.628</td>
<td>0.245</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Juniors</td>
<td>0.087</td>
<td>0.658</td>
<td>0.999</td>
</tr>
</tbody>
</table>

**p< 0.01**
Appendix M

Tukey HSD Post-hoc Procedure for

Parental Fostering of Autonomy by Age Group
Table 30

*Tukey HSD Post-hoc Procedure for Parental Fostering of Autonomy by Age Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>(I) Age</th>
<th>(J) Age</th>
<th>Mean Difference (I-J)</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>18-19</td>
<td>20-21</td>
<td>-1.193</td>
<td>.499</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td></td>
<td>-2.143**</td>
<td>.642</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td></td>
<td>-4.191***</td>
<td>1.022</td>
<td>0.000</td>
</tr>
<tr>
<td>20-21</td>
<td>18-19</td>
<td></td>
<td>1.193</td>
<td>.499</td>
<td>0.079</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td></td>
<td>-.950</td>
<td>.630</td>
<td>0.434</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td></td>
<td>-2.998**</td>
<td>1.015</td>
<td>0.017</td>
</tr>
<tr>
<td>22-23</td>
<td>18-19</td>
<td></td>
<td>2.143**</td>
<td>.642</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td></td>
<td>.950</td>
<td>.630</td>
<td>0.434</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td></td>
<td>-2.049</td>
<td>1.093</td>
<td>0.239</td>
</tr>
<tr>
<td>24-25</td>
<td>18-19</td>
<td></td>
<td>4.191***</td>
<td>1.022</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td></td>
<td>2.998*</td>
<td>1.015</td>
<td>0.017</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td></td>
<td>2.049</td>
<td>1.093</td>
<td>0.239</td>
</tr>
</tbody>
</table>

*p < 0.05, **p < 0.01, ***p < 0.001,
Appendix N

Tukey HSD Post-hoc Procedure for
Parental Role in Providing Emotional Support by Age Group
Table 31

*Tukey HSD Post-hoc Procedure for Parental Role in Providing Emotional Support by Age Group*

<table>
<thead>
<tr>
<th>Scale</th>
<th>(I) Age</th>
<th>(J) Age</th>
<th>Mean Difference (I-J)</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support</td>
<td>18-19</td>
<td>20-21</td>
<td>.757</td>
<td>.522</td>
<td>.469</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>1.061</td>
<td>.673</td>
<td>.392</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>2.795*</td>
<td>1.070</td>
<td>.045</td>
<td></td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>18-19</td>
<td>-.757</td>
<td>.522</td>
<td>.469</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>.304</td>
<td>.660</td>
<td>.698</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>2.038</td>
<td>1.063</td>
<td>.221</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>18-19</td>
<td>-1.061</td>
<td>.673</td>
<td>.392</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>-.304</td>
<td>.660</td>
<td>.698</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>1.734</td>
<td>1.144</td>
<td>.428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>18-19</td>
<td>-2.795*</td>
<td>1.070</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>-2.038</td>
<td>1.063</td>
<td>.221</td>
<td></td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>-1.734</td>
<td>1.144</td>
<td>.428</td>
<td></td>
</tr>
</tbody>
</table>

* *p < 0.05