A REASON TO LIVE: THE PROTECTIVE INFLUENCE OF CLOSE FRIENDSHIPS ON COLLEGE STUDENTS

By

KEELY J. HOPE

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2009
To my brother, Alex, for inspiring me, yet never knowing his influence
ACKNOWLEDGEMENTS

I have had the honor of working with some remarkable individuals along my journey. These individuals have helped me grow, change, and develop into the person I am today and I would not be at this place in my life if it had not been for some of the following people. I want to thank Dr. Sondra Smith-Adcock for understanding my needs and taking the time to ask the questions that allowed me to disclose and develop. I also want to thank her for recognizing my ability to “talk it out” and helping me translate that into this body of work. I would like to recognize and thank Dr. Wayne Griffin for serving as a teacher, a supervisor, and mentor. I am truly grateful to his patience, support, and encouragement over the past few years. I have also had the pleasure of working with Dr. Harry Daniels during this process and I am eternally grateful to his instruction and his encouragement of “fussing” with ideas. The inception of my dissertation topic began in his course. I would also like to thank Dr. Sandra Seymour and Jodi Irving for their unique individual perspectives and wholehearted support. Additionally, I would like to recognize Dr. Carl Sheperis, at Mississippi State University, for encouraging me to pursue a doctorate and influencing my decision to come to the University of Florida. Without his confidence in my abilities, I am not sure I would be where I am today.

My interest in research topics, as with many individuals, originated in some very personal experiences. I would like to thank my mother, Jacquelyn Hope Chapman, primarily, for demonstrating the life of a strong professional woman and secondarily, for sharing the story of her unique attachment history with my brother. That story made me critically think about aspects of life and has led to what has become a journey of learning and understanding. I want to recognize my brother, Alex Hope, who has influenced many aspects of my life without ever realizing it. I am grateful to John Chapman for coming into our lives and putting up with us for
this long. My grandmother, Agnes Maynor, has given her all to my family and I am especially
grateful for her wisdom and willingness to receive constructive criticism well into her 80s.

I am blessed to have people in my life that I consider great friends. These are the people
that I turn to for love and support. I especially want to acknowledge Kevin Guthrie. Without
his genuine caring, creative diversionary tactics, and assistance when I thought I did not need
any, I truly think I would have not been able to succeed at this level. I also want to recognize
Allison Lawrence, for understanding me and providing unwavering support throughout our
friendship. Dawn Thompson has been my friend since the days of junior high school and I thank
her for remaining a part of my life and for reminding me who I really am. I appreciate my friends
who have finished this journey ahead of me and I am thankful that you proved that this goal is
achievable. I want those who are still working, or have yet to begin, to know that this
accomplishment is possible.

In some way, everyone that I have been fortunate enough to meet has contributed to my
path. I would like to recognize Betsy Pearman, my coworkers at Meridian, my clients, my
students, and both my coworkers in housing and the law school. I truly believe I learn from
everyone I meet and I know I will continue learning throughout the rest of my life’s journey.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>8</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>11</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>14</td>
</tr>
<tr>
<td>1.1 Adult Attachment</td>
<td>14</td>
</tr>
<tr>
<td>1.2 Reasons for Living</td>
<td>16</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>18</td>
</tr>
<tr>
<td>Need for the Study</td>
<td>19</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>22</td>
</tr>
<tr>
<td>Research Questions</td>
<td>22</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>23</td>
</tr>
<tr>
<td>Organization of the Study</td>
<td>24</td>
</tr>
<tr>
<td>2 REVIEW OF RELEVANT LITERATURE</td>
<td>25</td>
</tr>
<tr>
<td>The Issue of Suicide</td>
<td>25</td>
</tr>
<tr>
<td>Risk Factors Contributing to Suicide</td>
<td>26</td>
</tr>
<tr>
<td>Attachment Theory: Patterns, Behaviors, and Bonds</td>
<td>30</td>
</tr>
<tr>
<td>Suicidal Ideation and Attachment</td>
<td>33</td>
</tr>
<tr>
<td>Attachment and Friendships, or Close Relationships</td>
<td>34</td>
</tr>
<tr>
<td>Attachment Pattern, Reasons for Living, and Suicide Risk</td>
<td>38</td>
</tr>
<tr>
<td>Summary</td>
<td>40</td>
</tr>
<tr>
<td>3 METHODS</td>
<td>41</td>
</tr>
<tr>
<td>Research Design</td>
<td>41</td>
</tr>
<tr>
<td>Subjects and Sampling</td>
<td>42</td>
</tr>
<tr>
<td>Sampling Procedures</td>
<td>43</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>45</td>
</tr>
<tr>
<td>3.1 Self-Report Questionnaire</td>
<td>45</td>
</tr>
<tr>
<td>3.2 Experiences in Close Relationships - Revised</td>
<td>45</td>
</tr>
<tr>
<td>3.3 Emotional Autonomy Scale</td>
<td>47</td>
</tr>
<tr>
<td>3.4 College Student Reasons for Living Inventory</td>
<td>48</td>
</tr>
<tr>
<td>Research Procedures</td>
<td>50</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>51</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>51</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-1</td>
<td>Factor Loadings for Emotional Autonomy Scale (12 Items)</td>
<td>65</td>
</tr>
<tr>
<td>4-2</td>
<td>Descriptive Statistics for Demographic Information</td>
<td>66</td>
</tr>
<tr>
<td>4-3</td>
<td>Descriptive Statistics for the Study’s Variables</td>
<td>67</td>
</tr>
<tr>
<td>4-4</td>
<td>Pearson Product Moment Correlations among the Study’s Variables</td>
<td>67</td>
</tr>
<tr>
<td>4-5</td>
<td>Final Model Coefficients for Reasons to Live for College-Aged Students</td>
<td>67</td>
</tr>
<tr>
<td>4-6</td>
<td>Reasons to Live Model for College Aged Students</td>
<td>67</td>
</tr>
<tr>
<td>4-7</td>
<td>Effects of Covariates on Dependent Variables</td>
<td>68</td>
</tr>
<tr>
<td>4-8</td>
<td>Unadjusted and Adjusted Means by Gender</td>
<td>68</td>
</tr>
<tr>
<td>4-9</td>
<td>Unadjusted and Adjusted Means by Ethnic Group</td>
<td>68</td>
</tr>
</tbody>
</table>
A REASON TO LIVE: THE PROTECTIVE INFLUENCE OF CLOSE FRIENDSHIPS ON COLLEGE STUDENTS

By
Keely J. Hope

May 2009

Chair: Sondra Smith-Adcock
Major: Mental Health Counseling

The purpose of this study was to examine the relationships among college age student’s experiences in close friendship, emotional autonomy and reasons to live. This study was grounded in Attachment Theory and College Student Development. A sample of undergraduate students was drawn from one Southeastern U.S. university. A total of 441 participants completed an online survey, including the Experiences in Close Relationships – Revised scale, Emotional Autonomy subscale, College Students Reasons to Live Inventory and a five-item demographic questionnaire.

The data were analyzed by means of Pearson correlations, stepwise multiple regression analysis, and multiple analysis of covariance. Results indicated a significant negative association between attachment anxiety and reasons to live implying that students that are more confident in a friends’ responsiveness within a close friendship reported more reasons to live. Results also indicated a significant negative association between attachment avoidance and reasons to live implying that students that are more comfortable being close to a friend within a close friendship reported more reasons to live. Results further indicated that gender and ethnicity influence specific reasons to live, such as responsibilities to friends and family, moral obligations, college
and future related concerns and fear of suicide. Findings suggest that attachment avoidance and
dependence on parents, as well as gender are predictors of reasons to live.

Results of the study are presented, limitations are addressed, and the implications with
regard to theory, counseling practice, research and future directions are discussed.
CHAPTER 1
INTRODUCTION

He who has a why to live for can bear with almost any how. ¹

—Nietzsche

Suicide is the third leading cause of death in those aged 15 to 24, with only accidents and homicide taking more lives each year (Center for Disease Control, 2008). In a year, there are approximately 10 suicide completions for every 100,000 18 to 24 year olds. According to the American College Health Association, in 2006 about nine percent of males and ten percent of females seriously considered suicide within a 12-month period (American College Health Association, 2007). Throughout their lifespan, males complete suicide at a rate of 3.8 deaths per one female death, whereas females attempt suicide more often, at a rate approximately 3 times for every one male attempt (CDC, 2008). Many more people are at risk for suicide each year. Suicidal ideation is not reported with as much accuracy as suicide completion rates, which makes understanding what contributes to young people choosing suicide challenging. When suicidal ideation has been examined in college students, rates have ranged from between 9% (Furr et al., 2001; Kisch et al., 2005), 24% (Westefeld, Homaifar, Spotts, Furr, Range & Werth, 2005; Westefeld, Button, Haley, Kettmann, Macconnell, Sandil et al., 2006) and 32% (Westefeld & Furr, 1987).

Hopelessness among college students, or feeling as if there is no way to make things better and having a pessimistic outlook toward the future, is a strong indicator of suicide completions (Beck, Weismann, Lester, & Trexler, 1974; Shneidman, 1996). For example, up to 66% of college women and 52% of men reported feeling hopeless at least once during 2006 (ACHA, 2007). Researchers continue to try to understand reasons college students are at a high risk for

¹ The epigraph to this chapter is drawn from Frankl, 1984
suicide in order to effectively intervene and reduce suicide rates among young people. A pervasive sense of hopelessness reported among college students is an indication there is a need to discover factors contributing to a person’s reasons to live.

College students experience a number of difficulties that may contribute to hopelessness. Transition to college, including shifting from living with family to living alone and creating new support systems, can be difficult. When young people move away from existing support systems, they often face social, academic, financial, existential, familial, and personal transitions contributing to an overload of stress and strain on coping abilities. In times of crisis, students may perceive asking for help from professionals as an inability to cope and may not use campus resources for support. Relying on assistance from peers during the college years has been shown to be important for successful transition and a protective factor against suicide (Westefeld et al., 2006). In particular, having friends, being involved in extra-curricular activities, and having strong social connections help to prevent suicide (Marion & Range, 2003; Maris, 2002; Westefeld, Cardin, & Deaton, 1992; Zhang & Jin, 1996).

For college students, friendships serve as a support network during college and possibly throughout the rest of their lives. Social support is one of the most important protective factors for undergraduate students (Tao, Dong, Pratt, Hunsberger, & Pancer, 2007). High levels of perceived social support and positive self-esteem have predicted better adjustment in first year university students (Friedlander, Reid, Shupak, & Cribbie, 2007). A sense of belonging to valued groups or relationships (e.g., family), as well as a sense of personal efficacy, can serve as a protective factor reducing suicidal risk (Joiner, 2006).

Belonging and feeling included influence the foundation of friendships. Adult relationships formed during college provide a feeling of security and safety when crises or problems occur,
just as parents provided protection to a child during infancy and childhood. As young adults, college students are beginning to experiment with new relationships contributing to their identities and assisting them in navigating a lifelong pattern of relationships. Developmentally, young adults are moving towards emotional autonomy leaving them free from the continuous need for approval, reassurance, or affection from their parents (Chickering & Reisser, 1993). Forming new and significant friendships provides needed support for young adults and can serve as a template for their future relationships. When college students experience difficulties, they follow patterns of seeking support formed in infancy and early childhood. The degree to which individuals display comfort in seeking support in times of crisis can be explained by attachment theory.

Attachment theory offers an explanation for a person’s view of self in relation to others. Bowlby, a primary proponent of attachment theory, posits that relationships in adulthood are patterned from interactions with parents as an infant and child (Bowlby, 1969/1982, 1988). Across the lifespan, individuals often model the way they behave in adult relationships according to patterns that begin in early childhood with their parents. Adult attachments become critical for college students because they are beginning to build new relationships with people outside of their families and develop their adult identities. Just as the relationship with the primary caregiver determines a sense of security for the young child, adult relationships also provide a framework for how the young adult perceives self in relation to others. Experiences in a variety of close relationships, including friendships, become critical in the formation of identity as an adult and in having a connection within the world.

Because research on attachment has focused mostly on romantic relationships, close friendships are often overlooked as a significant source of relational support in adulthood.
Friendships serve as a valuable source of support for college years and become critical during crises. Because friendships have been shown to be protective in college student adjustment, there is an expectation college students’ suicide might be mitigated by positive attachment experiences in close friendships.

**Theoretical Framework**

The theoretical framework for the ideas presented in this work integrates two distinctive points of view. Adult attachment theory provides an understanding of the influence of relationships within an individual’s lifespan through experiences with close relationships. Friendships, as important adult attachments, contribute to a person’s awareness of self and meaning within the relationship worldview. Beliefs regarding purpose of life or reasons for living, can aid in keeping a person’s hopes alive during times of despair, especially when a person is contemplating suicide.

**Adult Attachment**

Attachment theory offers an explanation for how relationship context can determine an individual’s response to crisis. According to attachment theorists, an individual’s attachment behaviors are activated in order to reduce the level of discomfort or fear associated with a crisis or a threat to personal safety. Individuals seek proximity to and security with an attachment figure during times of crisis. Once they have reached adulthood, a person’s relationship needs become more complex; influencing the choice of individuals a person identifies as attachment figures.

Adult attachment behavior or styles develop from early relationships with a parent or caregivers and influence the way individuals view self and others. According to Bowlby, internal working models of relationships are “used to predict the behaviors of others and to plan one’s own behavior in social interaction” (Collins, Guichard, Ford, & Feeney, 2004, p.198). A person
develops his or her working models of relationships based on cognitive schema learned through interactions with his or her parents. The concept of internal working models is crucial to attachment theory because the models are “presumed to organize attachment behavior, mediate individual differences in attachment style, and explain stability in attachment functioning across the lifespan” (Collins et al., 2004, p.197). As students transition between high school and college, they develop attachments less dominated by the parent or caregiver as a sole attachment figure and incorporate more complex emotional needs by choosing with whom they would like to form close friendships.

Internal working models of relationships are reflected in a person’s attachment style or the way they think, feel, or behave in close relationships (Collins et al., 2004). Bowlby used the term “working models” to describe a child’s internal mental representations of the world, significant people within it and how he or she views the self within the world. The cognitive representations humans form as children are not concrete and change based on life experiences. Bowlby utilized the term “working” to indicate the fluidity of ideas about relationships. Representations of self evolve from interactions with an attachment figures (i.e. typically parents or caregivers) and more importantly, from the attachment figure’s emotional availability and responsiveness to the child’s needs. In childhood, attachment needs include proximity to the attachment figure and regulation of felt security or how safe a child feels. Attachment needs in adult relationships are similar to those in childhood. Adult relationships involve complexities, (e.g., sexual attraction, parenting, and physical separation from family of origin) contributing to the development and differentiation of adult attachment research from child attachment research.

Friends, for many adults, become an integral part of developing a sense of self separate from one’s family of origin. Friendship in adulthood often replaces familial relationships because
of distance or conflict within a family of origin. Young adults, between college age and prior to engaging in a significant romantic relationship, confide in peers they have identified as important during times of need. Friends provide varying support depending on needs (e.g., advice and instruction, trust and intimacy, spending time together, and shelter or money if needed) (Barrera, Sandler, & Ramsey, 1981). For many young adults, friends become attachment figures because they fulfill the individual’s attachment needs.

Researchers typically define four prototypic adult attachment styles based on combinations of two underlying dimensions, anxiety and avoidance (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Fraley, Waller, & Brennan, 2000). Anxiety, as an attachment concept, is used to describe the degree to which individuals worry about being rejected, abandoned, or unloved by significant others. Avoidance is used to reflect the degree to which individuals limit intimacy and interdependence with others. An individual with low levels of anxiety and avoidance is categorized as having a secure attachment style. Secure adults typically possess positive views of self and others. Individuals not categorized as secure, are deemed as having an insecure attachment and can fall into three separate classifications: dismissing, preoccupied, or fearful (Bartholomew & Horowitz, 1991).

A relationship with an attachment figure is important for the development of self and critical for learning how to relate to others. Significant friendships are critical during times of crisis. Support from others can serve as the difference between having a positive or negative experience after a crisis. Friendships can also become meaningful for those searching for meaning to life or a reason for living during a suicide crisis.

**Reasons for Living**

Throughout time, human kind has searched for the meaning of life. Well-known existentialist Viktor Frankl, gained insight into the human experience through observing
inhabitants of the concentration camps during World War II. He learned a person was more
likely to survive the atrocities if they found meaning within their life, the suffering they endured,
or believed they were to serve a greater purpose in life (Frankl, 1984). Having purpose, or reason
to live, enables many to successfully manage crises and grow from them.

A reason to live is defined by Frankl as the belief a person has something meaningful in
life. Utilizing Frankl’s work, Linehan, Goodstein, Nielsen, and Chiles (1983) hypothesized
suicidal individuals lacked key adaptive characteristics present in non-suicidal persons. Key
adaptive characteristics such as having a positive outlook on the world and expectations for the
future have been noted as being different in suicidal and non-suicidal persons. (Frankl, 1984;
Linehan et al., 1983). Suicidal individuals are also thought to have more rigid cognitive views or
dichotomous thinking (i.e., right or wrong) contributing to thoughts and feelings there is no other
plausible solution to a problem except suicide (Linehan et al., 1983; Shneidman, 1996). Linehan
et al. (1983) believed cognitive patterns of non-suicidal people differed from those
contemplating suicide and found suicidal individuals identified fewer reasons for living than
non-suicidal individuals. These negative and apathetic cognitions can be associated with
hopelessness and depression, commonly known risk factors for suicide (Beck et al., 1974;
Shneidman, 1996).

Attachment theory suggests people view relationships through schema, or internal working
models developed during infancy and childhood based on interactions with a parent or caregiver.
These early relationships form the basis of subsequent relationships with regard to how an
individual understands self and the role of self within the world. Connecting with another person
can be very important for creating meaning in life. A person’s connections with friends and
family can contribute to a sense of security within the world ultimately serving as a reason for living during a suicide crisis.

**Statement of the Problem**

Suicide and suicide attempts are epidemic throughout the United States. Suicide is the third leading cause of death in people aged 15 to 24 and the eleventh leading cause of death in the United States (CDC, 2008). An average of one young person dies by suicide every two hours and 4.8 minutes (CDC, 2008). One suicide death occurs approximately every 16.1 minutes (CDC, 2008). In individuals’ aged 25 to 34, suicide is the second leading cause of death (CDC, 2006). In general, the rate of male suicide outnumbers females by 3.8 to one in the rate of completed suicides (CDC, 2008). The National Health Statistics in coordination with the CDC approximate that each year 967,570 years of potential life are lost to suicide (CDC, 2008). If a suicide occurs every 16.1 minutes, family and friends lose a loved one and become survivors at the same rate.

While these statistics alone are staggering, they do not account for the number of suicide attempts. According to Goldsmith, Pellmar, Kleinman, & Bunney (2002), there is one suicide for every 25 suicide attempts or approximately 810,975 suicide attempts per year. In 2008, the CDC reported attempts at suicide in the young outnumber any other age group at a rate of approximately 100-200:1. This means approximately every 39 seconds, a person in the United States attempts suicide (CDC, 2006). The rate of attempted suicide by females outnumbers males by two to three times more during a lifetime (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

Suicide research has traditionally focused on identifying individual characteristics of risk, or shared aspects of those individuals completing suicide to create “risk factors” information guiding awareness and prevention programs. Among some of the identified risk factors are lower to middle class Caucasian males aged 24 to 38 diagnosed with substance dependence or abuse or
depression. (CDC, 2008). Although suicide deaths occur more frequently among widowed or divorced individuals, research has not focused on characteristics or patterns of relationships (Bongar, Goldberg, Cleary, & Brown, 2000). Because every suicide affects at least six friends or family members, relational factors as protective factors for suicide are important to understand.

Research has demonstrated individuals completing suicide also have some psychological risk factors in common (Shneidman, 1996). Commonalities include a sense of frustrated psychological needs comparable to the existential aspects of a person attempting to find meaning in life as presented by Frankl (1984). A sense of belonging and security are some of the higher order needs that are important in a close friendship. Self-actualization occurs when a person’s basic needs (e.g., shelter, warmth, security, self-esteem, and love) are met (Maslow, 1968). Support given by a friend can provide a person with many of these psychological needs (Barrera et al., 1981) and taken together suggests a friend can be an important protective factor, to lessen the frustrated psychological needs of a suicidal person. The contributions of Shneidman have advanced the field of suicidology, but much of his research has focused more on the individual aspects of the person completing suicide rather than relational factors.

The relationship between attachment and suicide has not been explored thoroughly. Friendships, as a type of adult attachment formed in young adulthood, are especially important to study in relation to suicide as they may provide a sense of belonging during the transitional time of college.

Need for the Study

College students are a distinct population and an important group to study because there is a high rate of suicide between the ages of 18 and 24 (CDC, 2008). Students face many challenging issues (e.g., separation from family and friends, financial freedom, time management, etc.) on a daily basis. While these challenges foster emotional autonomy and
independence, they also can place tremendous pressure on the emerging adult. Depending on their experiences during childhood, a college student may be prepared to face the demands of college life or may find the challenges overwhelming. Multiple stressors can contribute to situations that make the college student feel deficient in problem solving. While there have been studies designed to study college student development, many researchers have utilized college students as a convenience sample and generalize their findings to adults. Special research considerations should be applied to a college student population so the needs of the young adults, aged 18 to 24, can be understood more thoroughly and intervention efforts can be developed on college campuses.

Differences in rates of suicide completions and attempts by gender have been widely documented (i.e., males complete suicide at a higher rate, while attempts by females outnumber those by males). Gender is related to differences in suicide and thoughts regarding suicide (Ellis & Lamis, 2007). Females have a greater fear of death or injury than males, while males have a greater fear of social disapproval related to suicide (Rich, Kirkpatrick-Smith, Bonner, & Jans, 1992). Males exhibited more aggressive, risk-taking, and injury producing suicide-related behaviors (Coggeshall & Kingery, 1999; Langhinrichsen-Rohling, Lewisohn, Rohde, Seeley, Monson, Meyer, et al., 1998). Edwards & Holden (2003) reported levels of hopelessness accounted for a greater amount of variance in suicidal ideation reported by females than for males. To fully understand the influence of any factor on suicide and suicidal ideation, examining gender difference is important.

Attachment behaviors, such as seeking proximity to an attachment figure to attain a sense of safety and security, are initiated by the onset of a crisis (Bowlby, 1969/1982, 1988). Suicide is an extreme response to crisis and can often be prevented if the suicidal person receives help.
Suicide research has traditionally focused on individualistic risk factors (i.e., commonly occurring characteristics of those who have completed suicide) (Cantor, 2000; CDC, 2008; Cheng & Lee, 2000; Granello & Granello, 2007; Holmes & Holmes, 2006; James, 2008; Kerkhof, 2000; Lester, 2001; Roy, Nielson, Rylander, & Sarchiapone, 2000; Shneidman, 1996). Understanding a person’s experiences in relationships can also be critical in understanding what keeps a person alive during a suicide crisis.

Existing studies applying attachment theory to suicidality are limited in scope. Previous research has almost exclusively used clinical populations including female and adolescent clients admitted to inpatient psychiatric facilities for suicidal ideation or attempts. The majority of inpatient populations have existing clinical diagnoses that are derived from the Diagnostic and Statistical Manual - Fourth Edition – Text Revision (DSM-IV-TR). Clients who are in outpatient treatment are also represented in studies on suicide and attachment theory. Understanding clients who are seeking help for their stressors though inpatient and outpatient counseling settings is important, but it is also crucial to gain insight into a general population who may or may not have resources to seek professional help. Studies examining reasons to live in a nonclinical population are needed to learn about what factors contribute to suicide and what effectively keeps people from engaging in suicidal ideation and suicide-related behaviors. Focus on distinct clinical populations provides limited explanations of attachment patterns on thoughts of suicide. There has been little research conducted on college student attachment patterns and suicidal ideation or its positive corollary, reasons to live.

Suicide-related behaviors (i.e., attempts and completions) and suicidal ideation have been examined in many studies. Traditional measures of suicide have included rates of completions, rates of hospital admissions for intentional self-injury, and self-reported measures of ideation.
Typically self-report measures ask respondents to report the number of attempts, frequency, and rate of previous suicidal ideation to identify if a person is at risk for suicide. Goldston (2000) found 95% of self-report measures of suicide used negative, deficit-related, or pathology-related factors (e.g., depression, substance abuse) to assess risk of suicide. Understanding protective factors keeping a person alive during a suicide crisis contributes to a strength-based perspective that can be used in working with suicidal clients. According to Westefeld et al. (2006), “identifying reasons to live is more crucial in preventing suicide than the ability to identify reasons not to die for college students” (p.935). Focusing on reasons to live can aid counselors in understanding clients and can also be used to develop suicide prevention and intervention on college campuses.

**Purpose of the Study**

The purpose of this study is to understand the relationship of college students’ experiences in close friendships on reasons for living and to expand the search on protective factors against suicide in college students. The findings of the current study will assist practitioners working with college students understand the significance of close friendships on a person’s reason to live. Ultimately, if mental health professionals can understand a person’s experiences in close relationships (i.e., attachment patterns in friendships), then future counseling and interventions can effectively use a person’s support systems with the intent of preventing suicide and suicide attempts.

**Research Questions**

This study addresses the following research questions:

- Is there a significant relationship between college-aged students’ attachment anxiety and reasons to live?
- Is there a significant relationship between college-aged students’ attachment avoidance and reasons to live?
• Is there a significant relationship between gender, ethnicity, and college-aged students’ attachment anxiety?

• Is there a significant relationship between gender, ethnicity and college-aged students’ attachment avoidance?

• Is there a significant relationship between gender, ethnicity and reasons to live?

• Is there a significant relationship between gender, ethnicity, attachment anxiety, and attachment avoidance and college student’s reasons to live when controlling for emotional autonomy?

• Is there a significant relationship between gender, ethnicity, attachment anxiety, attachment avoidance and the subscales of the College Student Reasons for Living Inventory (i.e., Survival and Coping Beliefs, College and Future-Related Concerns, Moral Objections, Responsibility to Friends and Family, Fear of Suicide, Fear of Social Disapproval) when controlling for emotional autonomy?

**Definition of Terms**

The following terms are operationally defined corresponding to how they will be used in this study.

• ATTACHMENT ANXIETY. The extent to which a person feels about their partner’s availability during a relationship or the view of their friend’s responsiveness within a relationship (Fraley, Waller, & Brennan, 2000).

• ATTACHMENT AVOIDANCE. The extent to which a person is comfortable with being close to a person in a close friendship (Fraley et al., 2000).

• COLLEGE STUDENTS. Individuals between the ages of 18 and 24 who are enrolled as undergraduates in a four-year university. These individuals do not reside with their families while attending courses.

• EMOTIONAL AUTONOMY. The degree to which young adults “have relinquished childish dependencies on and infantile perceptions of their parents” (Steinberg & Silverberg, 1986). In addition, it refers to the “perception the young adult holds about his or her parents rather than his or her actual behaviors” (Beyers & Goossens, 2003, p.367).

• ETHNICITY. Participant’s self-identification with a particular ethnic background.

• GENDER. Participant’s self-identification as male or female.

• REASONS TO LIVE. The thoughts or beliefs that college students place importance on during a difficult time, especially when contemplating suicide (Westefeld, et al., 1992).
• SUICIDE. The Institute of Medicine (IOM) defines suicide as a “fatal self-inflicted destructive act with explicit or inferred intent to die” (CDC, 2008).

• SUICIDAL IDEATION. Thoughts, wishes, or desires that a person has regarding not wanting to be alive or plans to take his or her own life. The IOM (2002) defines suicidal ideation as “thoughts of harming or killing oneself” (CDC, 2008).

• SUICIDE ATTEMPTS. The IOM defines a suicide attempt as “a non-fatal, self-inflicted destructive act with explicit or inferred intent to die” (CDC, 2008).

• SUICIDE-RELATED BEHAVIORS. “Self-inflicted, potentially injurious behavior[s] for which there is evidence (either explicit or implicit) either that (a) the person wished to use the appearance of intending to kill himself/herself in order to attain some other end; or (b) the person intended at some undetermined or some known degree to kill himself/herself” (Silverman, Berman, Sandaal, O’Carroll, & Joiner, 2007, p.272). This includes suicide attempts and completions.

Organization of the Study

The remainder of the study is organized into four chapters. Chapter Two provides a review of the relevant literature. Chapter Three provides an overview of the methods used in the study. The next chapter will discuss research results of the data analysis. The final chapter includes a discussion of the major findings, limitations, and implications of the results.
CHAPTER 2
REVIEW OF RELEVANT LITERATURE

Suicide, the act of taking one’s own life, has occurred for the majority of recorded history. The act of killing oneself can be prevented. Families, medical professionals, mental health professionals, social scientists, and even historians strive to learn the reasons why individuals take their own lives. Despite the knowledge that has been uncovered as to why individuals die at their own hands, the uniqueness of each person’s circumstances contributes to difficulty in understanding reasons to suicide. Furthermore, there have been few efforts to examine reasons to live in college populations.

The Issue of Suicide

Suicide is the 11th leading cause of death in the United States, which equates to 89 completed suicides per day or one suicide every 16 minutes (Center for Disease Control, CDC, 2008). In young people, ages 15 to 24, suicide is the third leading cause of death, meaning one young person kills him or herself every two hours and 2.1 minutes. The young outnumber any other age group regarding attempted suicide at a rate of approximately 100-200 to 1 (CDC, 2008). In individuals’ aged 25 to 34, suicide is the second leading cause of death (CDC, 2006). Even with these staggering numbers, it is the elderly population that completes suicide at higher rates than other groups (i.e., at an average of 14.2 completions per day). Across age groups, males outnumber females by 3.8 to one in the rate of completed suicides and represent approximately 79% of all completed suicides within the United States (CDC, 2008). The National Health Statistics in coordination with the CDC approximate that each year 967,570 years of potential life are lost to suicide (CDC, 2008).

Suicide has been ranked as highly as the second leading cause of death in college students (Jed Foundation, 1998) and while the overall numbers have lessened in the last ten years, the
issue has not gone away. In 2006, the American College Health Association found that about nine percent of college aged males and ten percent of females reported seriously considering suicide with a 12-month period (ACHA, 2007).

**Risk Factors Contributing to Suicide**

Risk factors for suicide have been identified as common traits and experiences in those who have completed suicide by examining two primary sources of data: mortality rates and interviews. Risk factors related to race, ethnicity, gender, and age have been determined based on mortality rates. Rates are calculated following completed suicides and demographic information on the individuals who complete suicide is obtained through coroner’s reports. The psychological risk factors that have been identified in literature are most often based on studies with survivors that occur after an attempt or completion. Many of the studies to assess psychological risk following a suicide completion are conducted with survivors or families of suicide.

Shea (2002) defined a risk factor as a “characteristic of [a] large sample of people who have committed suicide that appear to be statistically more common than would be expected” (p.69). There is no exhaustive list of suicide risk factors so it is important to note that risk factors that have been identified are not necessarily causes but may influence a person’s disposition to suicide. The CDC (2006) identifies risk factors as being a male (i.e., 3.7 suicides to one female) and being of a Caucasian background (i.e., rate of 12.3 of Whites to 5.8 of non-Whites). Widowed individuals have the highest rate of suicide followed by divorced individuals, single or never married, married, and the lowest rates are seen in individuals who are married with children (Bongar, et al., 2000). Current research suggests that the rate of suicides by African-American males increased 233% from 1980 to 1995 and became the seventh leading cause of death for African-Americans aged 10 to 14 in 1999 (Day-Vines, 2007).
Psychological factors can have a profound effect on individuals at risk for suicidal ideation and suicide. Depressed mood has a connection to suicide risk. Approximately two thirds of individuals who complete suicide have been diagnosed with depression and the risk of suicide for those diagnosed with Major Depressive Disorder is 20% higher than the general population (Gotlib & Hammen, 2002). Risk of suicide is approximately 50 to 70% higher for individuals diagnosed with alcohol dependence than the general population. Individuals who are socially isolated are also considered at a higher risk for suicide (CDC, 2006). Bongar et al.’s (2000) conclusions suggest that the loss of an important relationship or the lack of a significant other may influence an individual to consider or attempt suicide. Brent, Perper, Moritz, Baugher, Roth, Balach, et al., (1993) reported that individuals who completed suicide were more likely to experience interpersonal conflict, “disruption of a romantic attachment,” and “legal or disciplinary problems” in the year preceding the death when compared to a community-matched control. Rich, Young, and Fowler (1986) found that separation or rejection was a more common predictor for suicide in those under the age of 30 than for those older than 30.

To address the concept of finding common psychological factors of risk, Dr. Edwin Shneidman began the process of conducting psychological autopsies in 1949. He “blindly” compared approximately 700 actual suicide notes with a control sample of simulated suicide notes written by nonsuicidal people (Shneidman, 1996). He then conducted interviews with family members of individuals who completed suicide. The psychological autopsy method was utilized to gain insight into the reasons a person chooses to end his or her life, per the family’s perspective in hindsight.

Using the information gained through psychological autopsies, Shneidman reported ten psychological conditions that were common in those individuals who attempt and complete
suicide. These identified risk factors were present in at least 95 out of 100 completed suicides cases that Shneidman studied (Shneidman, 1996). The following psychological conditions have implications for working suicidal clients: (1) an individual’s search for a solution, (2) cessation of consciousness, (3) unbearable psychological pain [psychache], (4) frustrated needs, (5) hopelessness, (6) ambivalence, (7) constricted thinking, (8) escape, (9) communication of intention, and (10) extension of lifelong personality styles (i.e., a ‘suicide career’) (Shneidman, 1996). Although it can be said that these conditions are associated with a suicidal population, none of these conditions cause a person to be suicidal or attempt suicide. Though these conditions are common to persons who attempt suicide, it also is important to note that each person is unique and factors contributing to suicide also are unique.

According to Shneidman’s research, contributing factors related to suicide transcend gender, race, age, and psychiatric diagnosis. Shneidman suggests that a suicidal person is seeking a solution to a problem. This solution could be to any type of problem, but Shneidman suggests the person views the only solution is to end their life. Knowing what type of problem a person is addressing is important in order to help. However, a counselor should also address the solutions that the person is considering along with the strategies he or she has utilized in the past for similar problems or stressors. Another common goal for suicidal clients is cessation of consciousness, which is best understood as stopping any unbearable pain. Psychological pain is the most common stimulus for those contemplating suicide. Shneidman refers to psychache as what it is that the person is trying to stop or escape (Shneidman, 1996). Frustrated psychological needs or generally, human needs, are a common stressor for suicidal individuals. These needs may be unfulfilled or blocked for a variety of reasons. These unfulfilled needs may include achievement, affiliation, nurturance as proposed by Murray (1938) or those cited by Maslow
Individuals who are suicidal also are likely to feel a sense of hopelessness or helplessness. Clients may state, “there is no one that can help me” or “there is nothing I can do.” Ambivalence towards life and death is a common cognitive state for those who are suicidal. The underlying paradox often is that these individuals both want to die and to be rescued. A suicidal person often has a constricted perceptual state; he or she may view things narrowly as if he or she had tunnel vision, (e.g., “there is only one way out”). Utilization of the word “only” can be telling as using this wording may suggest dichotomous thinking and the narrowing of options. Individuals who are suicidal wish to escape psychological pain and this escape is the universal motivation for suicide. Shneidman concluded, contrary to popular belief, that there usually is a communication of intention. A life-long style of coping or what Shneidman terms a “suicidal career,” suggests that people are consistent throughout life in reactions to certain types of stress or problems, (i.e., coping patterns). These individuals are seen as self-destructive and have repeatedly exhausted many of their coping outlets (Maris et al., 2000).

In order to fully understand how to help prevent suicide, attention should be given to the reasons that people do not harm themselves. Support from peers, or close friendships, has been recognized as a protective factor for college students and has been documented as a predictor of adjustment for first year college students (Greening & Stoppelbein, 2002; Knott & Range, 1998; Tao et al., 2000; Westefeld et al., 2006). The ability and willingness to reach out to others for social support is a protective factor for suicide within college students (Levine, 2008; Westefeld et al., 2006).
To assess if attachment anxiety and attachment avoidance influenced help seeking, Vogel and Wei (2005) hypothesized that there would be a positive direct link between college students with high attachment anxiety and help-seeking intentions and a negative direct link between college students with high attachment avoidance and help seeking intentions. Results indicated that college students with attachment anxiety are likely to seek professional help when in distress, while those with attachment avoidance are less likely or even reluctant to seek professional help. Vogel and Wei (2005) found that individuals with attachment anxiety and those with attachment avoidance perceive less social support than secure individuals, which actually increases their likelihood of seeking professional help. This is thought to happen because a lack of perceived social support increases distress in turn influencing seeking outside help. This research also suggests that individuals with attachment anxiety are more likely to acknowledge distress that in turn allows them to seek help.

A person’s experiences in close relationships can aid in understanding an individual: how they see themselves, and how they relate to others in the world. Relationships and the attachment patterns that define them can assist clinicians and researchers in understanding what may prevent young adults from suicide.

**Attachment Theory: Patterns, Behaviors, and Bonds**

During childhood, the child’s own relations with a caregiver, or an authority figure influence a preferred relational style, and usually during adolescence, peer relations. A person’s preferred relational style can be influenced by multiple factors, including biological, sociological, and even environmental factors. The relationship between a child and the caregiver has been well researched in terms of bonding and how the physical bond between a caregiver and an infant affects future relationships (Cassidy & Shaver, 1999). The idea that these bonds affect future relational patterns has been termed attachment theory. John Bowlby (1969/1982, 1988),
the well-documented attachment theorist, “regarded the primary attachment relationship as a prototype for later social relationships” (as cited in Platts, Tyson, & Mason, 2002, p.332).

Bowlby explored the role of context, emotion, cognition, and individual differences within interpersonal attachment behaviors. The individual behaviors of a child or an adult contribute to an individual attachment behavioral system. These behaviors affect the perceived “bond” between an individual and the attachment figure, (i.e. parent and child). Bowlby referred to the “attachment bond” as an affectional tie. The criteria for affectional bonds are as follows: the bond is persistent, not transitory; it involves a specific person, one that is not interchangeable with anyone else; the relationship is emotionally significant; the individual wishes to maintain proximity to or contact with the person; and the individual feels distress at involuntary separation from the person. In order for the bond to be termed an attachment bond, the relationship must meet the above five criteria and also include the condition that the individual seeks security and comfort in the relationship with the person. Security within a relationship is a key concept in attachment theory.

There are two categories associated with attachment bonds: secure and insecure attachments. A secure attachment occurs when a person has a figure that he knows is a safe haven in times of danger or fear. A secure bond allows for a natural progression of development because individuals develop a sense of security while exploring new things. An insecure attachment is formed when the person is not confident that he has a safe haven in times of danger. This perception of insecurity can be present for multiple reasons that can include, but are not limited to, abuse and neglect in early childhood. This does not, however, imply that the bond is absent and a person can still be attached to an attachment figure regardless of their feeling of insecurity.
An insecure attachment style can vary in terms of how it is classified. Fraley, Waller, and Brennan (2000) used a two dimension attachment model (i.e., attachment is measured by levels of anxiety and avoidance), while Hazan and Shaver (1987) reported three major attachment styles, two of which are insecure: avoidant and ambivalent. Utilization of a dimensional model allows for variations of patterns of attachment within a close relationship, rather than categorizing a person into a style. Feeney (1999) reports a person’s attachment patterns contribute to affect regulation, especially in times of dealing with negative emotion or emotional distress. Secure individuals (in terms of attachment style) are generally expected to handle negative emotion in a relatively constructive manner because there is an acknowledgement of the distress and then the ability to turn to someone for help with the problem. Self-disclosure is important in terms of admitting to a need for help and imperative in terms of seeking help.

Bowlby suggested there are certain conditions that have the potential to activate attachment behaviors. In adults, stressful conditions that occur in the physical, as well as social, environment, conditions that appear to threaten the future of the attachment relationship, and the conditions of the individual could activate attachment behaviors (Feeney, 1999). College students are making large developmental transitions that could contribute to the extreme stress associated with activating attachment behaviors, such as proximity seeking, comfort and closeness, and having a safe haven.

It is important to address gender differences in attachment. Hazan and Shaver (1994) postulate that because attachment bonds develop during infancy, gender should not define an attachment pattern. Although Hazan and Shaver (1994) report “the anxious/ambivalent pattern sounds very much like the clingy, dependent aspects of the female stereotype and the avoidant
pattern strongly resembles the stereotypical intimacy-evading male” (p.17), males and females do not fall disproportionately into any attachment category.

**Suicidal Ideation and Attachment**

There have been studies conducted with clinical populations to examine the relationship of suicidal ideation and attachment style. Many of these studies focused on an inpatient population with psychiatric diagnoses. Lessard and Moretti (1998) found that adolescents with predominantly fearful or preoccupied attachment patterns were more likely to endorse suicidal ideation. In a study of youth between the ages of 10 and 17 in an inpatient psychiatric facility, the researchers found a positive correlation between the severity of suicidal ideation and fearfulness and a negative correlation between suicidal ideation and secure and dismissing patterns. While these findings support a possible relationship between suicidal response and attachment styles, the researchers limited their investigation to an adolescent population with Axis I diagnoses who were receiving inpatient treatment.

A study with adolescents who were suicidal suggested that those who reported high levels of suicidality were significantly more likely to have a preoccupied attachment style and have unresolved issues in their attachment status (Adam, Sheldon-Keller, and West, 1996). Wright, Briggs, and Behringer (2005) studied adolescents who were treated or recently treated by a psychotherapist and utilized a mixed-method research design to examine the way that individuals with insecure attachment styles talk about themselves especially in terms of their body image. These researchers found that “suicidal adolescents are likely to be insecurely attached, in both dismissing and preoccupied ways” (Wright et al., 2005, p.488).

Studies also have found that traumatized females who are treated in an inpatient facility have insecure attachment orientations and that the same females typically receive a diagnosis that is related to an insecure orientation (e.g., borderline personality disorder) (Allen, Huntoon,
Fultz, Stein, Fonagy, & Evans, 2001; Diamond, Clarkin, Levine, Levy, Foelsch, & Yeomans, 1999; Gormley, 2004). While these researchers identified participants in the study as having an insecure attachment orientation, it does not appear that they specified the type of insecure style or the reasons why these women were being treated at an inpatient facility. Individuals with insecure attachment style typically have a traumatic childhood and the resulting negative view of others and the world affects their responses to any stressful situation, which could contribute to a higher likelihood that these individuals would see suicide as an option.

There is limited research that suggests a link between insecure attachment and a proclivity toward suicide. Suicidal behavior in adolescents has been linked with preoccupied and dismissing attachment styles, but this association was found in a sample of adolescents who were hospitalized or were receiving intensive treatment (Adam et al., 1996; Wright et al., 2005). A consistent link between attachment styles and suicide in adults however has not been established. Examining the relationship between attachment patterns and suicide ideation and behavior in practice would allow counselors to more fully understand clients’ complex relationship patterns and how those patterns affect his or her suicide-related communication and behaviors. Future research should include individuals that are not undergoing intensive treatment to try to assess a relationship between suicide risk and with attachment patterns in a nonclinical population.

Attachment and Friendships, or Close Relationships

A significant amount of research has addressed the relationship between early attachment and parental or romantic relationships, with only a more recent addition of non-romantic relationships or friendships and other close relationships (Fraley et al., 2000; Fraley, 2007; Grabill & Kerns, 2000; Markiewicz, Doyle, & Brendgen, 2001; Saferstein, Neimeyer, & Hagans, 2005). Friendships are important relationships throughout the life span and are especially important during childhood, adolescence and early adulthood because individuals learn how to
navigate relationships through these daily interactions. Saferstein, Neimeyer, and Hagans (2005) wanted to understand the relationship between attachment style and interpersonal qualities within a sample of late-adolescent college students. The participants of the study were asked to complete an attachment measure categorizing them as either secure, insecure avoidant or insecure anxious-ambivalent (Hazan & Shaver, 1987) and two questionnaires regarding friendship qualities, one for their “best friend of the same sex” and one for their “best friend of the opposite sex.”

Saferstein et al. (2005) found that insecurely attached individuals (i.e., avoidant and anxious-ambivalent) generally reported lower levels of companionship and security in relation to their best friends. Insecure attached individuals also reported higher levels of conflict with their best friends as compared to securely attached individuals. The women in the study reported high levels of companionship, protection, and affective bond in relation to their best friends, while men experienced a perception of security, greater aid and help from a same-sex friend than from an opposite-sex friend.

Saferstein et al. (2005) reported interactive effects of attachment style and gender on perceived friendship qualities. The results suggested that insecurely attached individuals experienced less security and significantly greater conflict in opposite-sex than in same-sex friendships. Findings presented from this study are important to consider when working with college students. The authors suggested that attachment might be qualified by the gender of the friend. Consideration of the possibility of an indirect relationship is important because it suggests that there could be a factor that unknowingly influences any opposite sex relationship (e.g., sex or sexual attraction, despite a platonic relationship). Saferstein et al. (2005) provided evidence that considering friendships when assessing attachment patterns is important. Attention should be
given to insecurely attached individuals’ social networks in order to help these students navigate friendships, relationships, and life.

Intimate relationships seem to foster social support that encourages positive development in young adults. Grabill and Kerns (2000) investigated whether having a secure attachment style related to a person’s capacity to have intimacy in friendships. Intimacy was defined as self-disclosure, responsiveness, and a person’s feelings of being understood, validated and cared for within the context of friendship. Because significant relationships were found between the three intimacy variables, a multiple analysis of variance was conducted using the intimacy measures as dependent variables and gender and attachment style as independent variables. The MANOVA yielded main effects of attachment style and gender on the intimacy variables, while no significant interaction was found between gender and attachment style.

While gender did not yield a significant interaction with attachment style, it was significant regarding all of the intimacy variables. Grabill and Kerns (2000) reported that “women differed from men in reporting significantly more self-disclosure, more responsiveness, and greater feelings of being responded to by others” (p.367) within friendships. These findings suggest that women become more intimate, or closer, with friends than men which could lead to women using friends as a source of support during times of crisis. Although university students participated in the study, the researchers generalized the results of the sample to the adult population and not to the college student population.

In a study conducted to discover the relationship between relational patterns, attachment, and psychological distress in college men and women, Frey, Beesley, & Miller (2006) believed that relational health among peers, mentors, and community (e.g., organizations or clubs) would predict lower psychological distress despite the level parental attachment security. Frey et al.,
(2006) also predicted that the quality of peer relationships would influence psychological distress in females while the quality of community relationships would influence psychological distress in males.

In the Frey et al., (2006) study, separate hierarchical regression models were created for males and females. Three predictor variables were entered into the model as following: the student’s year in school, the score for parental attachment (level of security), and three relational health composite scores (i.e., peer, mentor, and community). Year in school was not relevant for either gender, however, the parental attachment accounted for 15% of the variance of the model for both females and males. For females, the relational health scores accounted for 22% of variance of the model and 8% of the variance for males. Significance was attributed to the peer and community scores for females and to the community scores alone for males. Frey et al.’s, (2006) results suggested that psychological distress in college-aged females can be predicted by lower levels of parental attachment and decreased level of peer and community relational health. These findings imply that females cope better with psychological distress when they have secure attachment relationships as well as a positive sense of peer and community support. According to the results, males with secure attachment relationships and positive community support may cope better with psychological distress.

Fraley and Davis (1997) wanted to understand the development of close relationships in young adulthood by studying factors that either facilitate or inhibit transference of attachment-related functions from parents to peers. To achieve this, Fraley and Davis (1997) examined three key factors: “(a) specific features of close relationships that have been linked to attachment formation in infancy, (b) internal working models of attachment, and (c) perceived security of the peer” (p.133). The stages of transference of attachment-related functions were previously
studied by Hazan and Zeifman (1994) who found that over time, young adults transition to relying on peer relationships as alternates to parental attachments. Hazan and Zeifman (1994) interviewed over 100 children and adolescents from ages 6 to 17 by asking questions related to attachment components (i.e., proximity maintenance, safe haven, separation distress, and secure base). Results suggested that nearly all of the participants in the study were peer-oriented, or friend-oriented, in terms of proximity seeking meaning that all of the individuals preferred spending time with peers rather than parents. Between ages 8 and 14, a shift from identifying a parent as a safe haven to a friend became evident because adolescents begin to turn to their friends as sources of comfort and emotional support. Hazan and Zeifman (1994) found true attachment relationships with peers (i.e., relationships containing all four attachment components) in the 15 to 17 year old participants.

Fraley and Davis (1997) sought to replicate the Hazan and Zeifman (1994) study and expand the direction of their study to include personal and relational factors that aid the development of peer-attachment relationships. College students answered questions concerning attachment related functions (i.e., proximity seeking, safe-haven, secure base) by indicating whether they turned to parents or peers. Participants were more likely to use peers, rather than parents, as targets of proximity maintenance (approximately 78 % reported seeking proximity to peers) and were more likely to turn to their peers when upset (81%). Participants were not, however, as likely to turn to peers as someone to count on for advice (54%). While these participants had not yet relinquished the secure base function attachment with their parents, they had made transitions to utilizing peers as important relationships in their lives.

**Attachment Pattern, Reasons for Living, and Suicide Risk**

As college students transition from adolescence to adulthood, adjustment to a new role can lead to overwhelming feelings of stress. Among these changes is a transition from relying
on parents for comfort and security to relying on friends or other peers. Turmoil and distress can influence a person’s choice to suicide, but perceptions of support and safety may provide a student with reasons to live rather during a suicide crisis.

To investigate a relationship between attachment styles, reasons for living, and suicide risk among college students, Buelow, Schriber, and Range (2000) conducted research with a sample of 163 undergraduate students. They predicted that students with lower attachment strength and insecure attachment would report more suicidal thoughts and behaviors, and fewer reasons for living than students with secure attachments. Buelow et al., (2000) reported that a subscale of one of College Student Reasons for Living Inventory (Westefeld et al., 1992) (i.e., the Survival and Coping Skills subscale) was the best predictor of suicidal thoughts and behaviors. While this appears logical, the presentation of the results does not clearly support this conclusion. The authors reported that the “present mean of 4.40 (SD = 0.96) on the CS-RFL is comparable to the mean score of 3.98 reported by Westefeld, Badura, Kiel, and Scheel (1996a) in a sample of African-American students” (p. 32). The African-American subjects comprised only 21.5% of the sample that the researchers analyzed (Buelow et al., 2000). The author’s provide information on a subscale of the CSRLI, but do not identify to which one of six subscales to which they are referring. Buelow et al. (2000) did not report the use of the CSRLI subscales in the methods section, therefore, the results of the study are suspected to be following a post hoc analysis using a multiple regression.

Regression analysis indicated that the survival and coping beliefs subscale accounted for the most variance. The authors provided results to an ANOVA based on gender; however, gender was not included in any hypothesis for this study and the sample included 109 females and 45 males. The limited number of males who participated in the study was included as a
limitation. Although Buelow et al., (2000) conducted valuable research to try to understand attachment patterns, reasons for living, and suicide risk in college students, the results are limited in scope and suggested that subsequent research should be conducted within this area. The authors’ suggested that research should be conducted utilizing peer relationships to attain information of college students’ attachment patterns. The findings were further supported by a master’s thesis; however, the researcher used the Reasons for Living Inventory (Linehan et al., 1983) and the Adult Attachment Questionnaire (Hazan & Shaver, 1987). Cruz (2006) utilized a sample of college students to represent the general population of adults in the United States.

**Summary**

Examining attachment patterns of college students based on their friendships with others and investigating the role of attachment, as a reason to live during a suicide crisis will provide critical information for researchers and clinicians providing counseling services to college students. Information regarding college students’ attachment patterns and support systems can become important in treatment. Knowing what a college student views as a reason to live during a suicide crisis can provide hope in a situation that may seem hopeless. A review of the relevant literature offers an understanding of the problem of suicide in college students and the potential contribution of how experiences in close relationships influence reasons to live. Results of this proposed study should contribute to suicide research, college student development, and attachment theory.
CHAPTER 3
METHODS

The methodology used to address the research questions posed by this study is presented in this chapter. This study was designed to assess the relationship between college students’ attachment experiences within close friendships and their reasons for living. This chapter discusses the research design followed by identification of the subjects and sampling methods used in the study. The three instruments used in the study are presented along with their measurement properties. The procedures used in collecting the data are articulated as well as a statement of the research hypotheses with the analysis used in addressing each question. Confidentiality of the data is discussed and methodological limitations presented.

Research Design

A web-based (i.e., online) survey design was utilized in this study. Survey design is appropriate for use in this study because of the use of time, anonymity of participants, and ease of distribution. Use of self-report measures has been used with adequate reliability and validity in measuring both attachment constructs and suicidal ideation (Cassidy & Shaver, 1999; Range & Antonelli, 1990; Range & Knott, 1997; Rholes & Simpson, 2006).

The survey used in this study consisted of a self-report demographic questionnaire and three empirically validated instruments each with sufficient psychometrics. The dependent variable, reasons for living, was measured by the College Student Reasons for Living Inventory (Westefeld et al., 1992). The independent variables in this study were gender, ethnicity, emotional autonomy, attachment anxiety and attachment avoidance. Emotional autonomy was measured by the Emotional Autonomy subscale of the Emotional Autonomy Scale (EAS; Steinberg & Silverberg, 1986). Attachment in close friendships was measured by the Experiences in Close Relationships - Revised Scale (Fraley et al., 2000). Gender was defined by
the respondent’s self-identification as male or female and ethnicity was defined by self-identification with an ethnic background.

**Subjects and Sampling**

The target population for this study was undergraduate students between the ages of 18 and 24 currently attending a four-year academic institution. To approximate this population, students were recruited from a large university in the southeastern United States. This university is a large four-year state institution where the majority of students move away from home to attend. There were over 36,000 undergraduate students enrolled at the university during the 2007-2008 academic year. During the 2006 school year of the total number of students, 92% were between the ages of 18 and 24 during the 2006 school year.

Cohen (1992) reported that there are four factors that are involved in any statistical inference: sample size, significance criterion, population effect size, and statistical power. One factor may be derived from the remaining three. In order to approximate a sample size for this study, a significance criterion of .05 and a power of .80 will be used. The population effect size is estimated as .15 (Cohen, 1992). Based on these variables, and the number of independent variables, and the covariate, the estimated sample size for use in this study was 250.

The selected university provides counseling services for students through two counseling centers on campus. In 2005–2006, one of the counseling centers provided counseling for a variety of reasons to 1,336 undergraduate students. Undergraduates comprised 78.5% of the total number of clients at the counseling center and provided an adequate representation of total students (i.e., there were 35, 918 total undergraduate students making up 71.1% of total students in 2005 – 2006). (Institution, 2006). Only 1.7% of the students seen at the counseling center during the 2005-2006 school year reported living at home with their parents suggesting the majority of students enrolled at the university live away from their families. In 2006,
approximately 4600 students were residents of the county where the university is located. This number is less than 10% of the total population (including Graduate and International Students and students over 25 years of age) of students enrolled.

Although suicide is not typically a presenting problem during any intake for counseling, university students identified many factors contributing to suicide risk. During the 2005–2006 academic year, the greatest concern of students was relationship issues including general or family related issues as well as partner or roommate issues. Stress and anxiety, future goals, depression, self-esteem or confidence, the loss or death of a significant person, personal development and identity, and alcohol were the other highly ranked reasons for seeking counseling at the institution during 2005–2006 academic year.

**Sampling Procedures**

The proposed study was conducted under the guidelines and protocol consistent with the Institutional Review Board (IRB) at the university. There were two ways participants were recruited. After obtaining IRB approval, a letter explaining the purpose of the study was sent to instructors who were teaching undergraduate courses offered as general elective courses through a counseling program. Students enrolled in these undergraduate courses tend to represent the diversity at the university with regards to age, ethnicity, and declared major. Once permission to include the students was granted, the survey web address was given to the instructors to distribute to eligible students with the study description, inclusion criteria, and a link to the research survey. In addition, participants were recruited through the Department of Housing and Residence Education. The researcher met with the research coordinator and administrative personnel to provide an explanation of the purpose of the study. Once permission to include the students was granted, an invitation to participate including the survey web address was provided to the administration that distributed to all eligible students who reside on campus.
Instructors were provided with the survey web address to give to each student who agrees to participate and meets the following inclusion criteria: (1) they are between the ages of 18 and 24, (2) they are undergraduate students, and (3) they do not reside with their parents while attending classes. Students meeting the inclusion criteria were invited to respond to an online survey. An email was sent via instructor to prospective participants providing an online web address to locate the survey. The researcher’s contact information is provided in the case students have questions regarding participation in the study. Each participant also received a description of the study and was provided with information about their rights as a participant.

Participation in the study was voluntary and anonymous. Participants were asked to read the informed consent (Appendix A) after being directed to the on-line survey via the provided link to surveymonkey.com. If the student agreed to the terms of the informed consent, he or she chose the statement, “click here to agree and continue” box and then was forwarded to the survey questions. Participants were not able to view the questions unless they agreed to the terms of the informed consent.

Due to the sensitive nature of the study subject matter, the informed consent included a statement reminding the participants they could stop the survey at any time if they felt uncomfortable and unable to continue. Participants were provided with contact information for campus and community resources for counseling if needed. Campus resources included two centers that provide counseling to students and community resources included the county crisis center’s 24-hour help line in addition to a national suicide hotline that connects the caller with a trained phone counselor.

The online survey included an introduction to the study and directions, the informed consent, the Experiences in Close Relationships – Revised (ECR-R), the Emotional Autonomy
subscales of the EAS, the College Student Reasons for Living Inventory (CSRLI), and a self-report questionnaire. Data were collected online, stored in an Internet database, and transferred into Statistical Package for the Social Science (SPSS) upon completion of data collection.

**Instrumentation**

The instruments used in this study included the Experiences in Close Relationships – Revised (Fraley, Waller, & Brennan, 2000) (Appendix B), the Emotional Autonomy Subscale of the Emotional Autonomy Scale (Steinberg & Silverberg, 1986) (Appendix C), the College Student Reasons for Living Inventory (Westefeld, Cardin, & Deaton, 1992)(Appendix D) and a self-report questionnaire (Appendix E) assessing demographic information.

**Self-Report Questionnaire**

A self-report questionnaire was used to obtain information on individual characteristics of the study participants. The questionnaire included information regarding the participants’ gender, age, ethnicity, classification in college, and residence (i.e., on campus, off campus, or at home).

**Experiences in Close Relationships - Revised**

The Experiences in Close Relationships – Revised (ECR-R) (Fraley, Waller, & Brennan, 2000) is a revised version of Brennan, Clark & Shaver’s (1998) Experiences in Close Relationships (ECR) measure. The ECR-R consists of 36-items designed to measure individual differences in adults with respect to attachment-related anxiety (i.e., the extent to which people are insecure versus secure about other’s availability and responsiveness) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others versus secure depending on others). Fraley, Waller, & Brennan (2000) originally developed the instrument to measure anxiety and avoidance within a romantic relationship, however, the ECR-R is a measure of a person’s close relationships making it appropriate for use with close friendships. Fraley
(2005) provides instructions to researchers to amend the instrument for use in particular research and has measured attachment related constructs using instructions to think of a “best friend.” The ECR-R consists of two 18-item subscales and yields two separate subscale scores.

The Anxiety subscale of the ECR-R measures how secure a person feels in their friend’s availability during a relationship (e.g., “I often worry that my friends will not want to stay with me.”). A person’s view of their friend’s responsiveness within a relationship is also measured in the anxiety subscale (e.g., “I’m afraid that once my friend gets to know me, he or she won’t like who I really am.”). The Avoidance subscale measures the extent to which a person is comfortable with being close to a person in a close friendship (e.g., “I feel comfortable sharing my private thoughts and feelings with my friends.”).

Fraley et al. developed the ECR-R in 2000 to improve the psychometric properties of self-report attachment scales. The original pool of items was compiled from four self-report measures of adult attachment: Experiences in Close Relationships (ECR: Brennan et al., 1998); Adult Attachment Scale (AAS; Collins and Read, 1990); Relationship Styles Questionnaire (RSQ; Griffin and Bartholomew, 1994); and Simpson’s attachment questionnaire (1990). The items for the ECR-R were derived from an analysis using item response theory (IRT) and factor analysis of the original pool of items.

The ECR-R contains many items similar to the original four measures, but unlike other measures, the ECR-R provides items that are more evenly distributed across the range of traits found in anxiety and avoidance. Earlier criticisms of self-report measures of attachment included that it was difficult to discriminate between individuals who scored in the moderate of low ends to a range. To establish concurrent validity, Fraley et al. (2000) compared the anxiety and avoidance subscales with other self-report measures, such as the AAQ, providing support for
its utilization in research. Prior studies have reported satisfactory internal consistency for subscale items (i.e. ranging from .86 to .94 for anxiety subscale items and .93 to .96 for avoidance subscale items) (Barry, Lakey, & Orehek, 2007; Luke, Maio, & Carnelley, 2004; Overall & Sibley, 2008).

**Emotional Autonomy Scale**

The Emotional Autonomy Scale (EAS) (Steinberg & Silverberg, 1986) was designed to measure three aspects of adolescent autonomy: emotional autonomy in relationships to parents, resistance to peer pressure, and the subjective sense of self-reliance. The EAS consists of 20-items answered on a 4-point Likert scale and was designed to measure the aforementioned aspects of autonomy. A high score on the scale is meant to indicate that the respondent has greater emotional autonomy. Steinberg and Silverberg originally created four subscales of the EAS with reliabilities of .60 and a reliability of .75 for a total scale score. The full measure has been studied in relation to several measure of psychological adjustment within both adolescents and young adults (Beyers & Goossens, 1999; Fuhrman & Holmbeck, 1995; Lamborn & Steinberg, 1993). The EAS has been criticized for measuring emotional detachment from parent not emotional autonomy (Ryan & Lynch, 1989).

In response to the critique that the EAS does not measure emotional autonomy, Beyers, Goossens, and Van Calster (2000) completed a factor analysis and created a two-factor structure of the EAS. Emotional autonomy is determined by a 12-item subscale (alpha = .88) created from the original items that “measure the extent to which adolescents have relinquished childish dependencies on and infantile representations of their parents” (Beyers & Goossens, 2003, p. 369). Detachment, or Cognitive Detachment, can be determined from the remaining eight items (alpha = .72) that originally measured the perception of parents as ordinary people and individuation. Two subscales with sufficient psychometric properties were created from the
original 20-item scale as a result of the factor analysis (Beyers, Goossens, & Van Calster, 2000). The Emotional Autonomy subscale has shown to be a positive indicator of an adolescent’s independence from parents, while the Cognitive Detachment subscale was an indicator of less positive feelings associated with independence (Beyers & Goossens, 2003).

The Emotional Autonomy subscale has been used in research to aid in predicting psychological adjustment in adolescents as well as young adults (Beyers & Goossens, 2003). Giles and Maltby (2003) conducted a study of emotional autonomy, attachment, and interest in celebrities within adolescents. The authors utilized the EAS and found that as “emotional autonomy increases during middle adolescence [and] that attachment to parents decreases” (Giles & Maltby, p.818). Emotional Autonomy was chosen as a covariate, or control variable, to ascertain whether attachment anxiety or attachment avoidance has a relationship with a college student’s reason to live. Choosing emotional autonomy as a control variable should aid in reducing the possible confounding of the independent variable.

**College Student Reasons for Living Inventory**

The College Student Reasons for Living Inventory (CSRLI; Westefeld, Cardin, & Deaton, 1992) is a 46-item scale used to measure suicidal risk. The CSRLI is “an instrument that measures the extent to which college students place importance on various reasons for living even when contemplating suicide” (Westefeld et al., 1992, p.442). The CSRLI consists of six subscales with five to ten items in each subscale and yields six separate subscale scores. The authors report that the CSRLI can be used in three distinct ways: as a general indication of suicide (total scale score), to identify themes in students who are contemplating suicide (subscale scores), and as points of discussion during treatment (individual items).

Westefeld et al. (1992) developed the CSRLI as a way to measure “adaptive coping beliefs of college students” (p.444). The authors perceived adaptive beliefs to be missing in college
students contemplating suicide and wanted to aid university counselors in assessing suicide risk in college students. The CSRLI was patterned after the Reasons for Living Inventory (RFL; Linehan et al., 1983). The RFL measures potentially important beliefs as reasons for not committing suicide. Linehan et al. (1983) reported the findings of their instrument “strongly suggest that suicidal individuals differ from non-suicidal individuals in the degree to which they will endorse and attach importance to a set of life-oriented beliefs and expectancies” (p.283).

The items for the CSRLI were generated by asking 125 college students to “list reasons why you would not commit suicide even if the thought were to cross your mind” (Westefeld et al., 1992, p.444). The items were arranged into an inventory and administered to 384 college students. Each student was instructed to rate the statement’s importance as a reason for not killing themselves at this time in their life on a 6-point Likert scale ranging from not at all important (1) to extremely important (6). Factor analysis was completed for the items and the initial factor analysis produced 22 factors with the first six factors accounting for 39% of the total variance. Six subscales emerged from the factor analysis: (1) Survival and Coping Beliefs (SCB), (2) College and Future-Related Concerns (CFRC), (3) Moral Objections (MO), (4) Responsibility to Friends and Family (RFF), (5) Fear of Suicide (FS), and (6) Fear of Social Disapproval (FSD).

The reliability for the CSRLI using a general population has yielded favorable results. Cronbach’s alpha coefficients have ranged from .81 to .93 for the SCB subscale, from .84 to .88 for the CRFC subscale, from .79 to .89 for the RFF subscale, from .79 to .88 for the MO subscale, from .61 to .80 for the FS subscale, from .45 to .71 for the FSD subscale, and from .90 to .91 for the total scale (Westefeld, Scheel, & Maples, 1998; Rogers & Harlon, 1996; Westefeld, Badura, Kiel, & Scheel, 1996a, 1996b; Westefeld et al., 1992). To establish validity of the
CSRLI as a measure of suicidal ideation, Westefeld et al. utilized a sample of college students receiving counseling at a college counseling center. Cronbach’s alpha for the overall instrument with a clinical population was .93 and alphas for the subscales were: (a) SCB = .93, (b) CRFC = .86, (c) MO = .88, (d) RFF = .89, (e) FS = .80, and (f) FSD = .71 (Westefeld et al., 1998).

Westefeld et al. (1998) provided concurrent and discriminant validity of the CSRLI through the predicted relationship to other psychological constructs in the Beck Depression Inventory (BDI). To determine if the CSRLI was a valid measure of suicidal ideation in African-American college students, Westefeld et al. (1996a) compared a self-report of current perceived level of suicide risk with the CSRLI. The findings were compared to the results of an independent study of suicide risk in a Caucasian sample and the results provided a Cronbach alpha of .91 for the entire instrument when used with African-American college students.

**Research Procedures**

The dependent variable in the study was reasons to live measured by the combined score on the College Student Reasons for Living Inventory (Westefeld et al., 1992). The total scale score was used to measure an indication of suicidal ideation. The subscale scores were also used as a dependent measure to further identify and understand themes in college student’s reasons for living.

The independent variables used in this study included the attachment dimensions of anxiety and avoidance as measured by the Experiences in Close Relationships – Revised Scale (Fraley et al., 2000), emotional autonomy as measured by the Emotional Autonomy subscale of the EAS, as well as gender and ethnicity which were measured by participants’ identification and self-report.
Hypotheses

1. There is no relationship between college-aged students’ attachment anxiety and reasons to live.

2. There is no relationship between college-aged students’ attachment avoidance and reasons to live.

3. There is no relationship between gender, ethnicity, and college-aged students’ attachment anxiety.

4. There is no relationship between gender, ethnicity, and college-aged students’ attachment avoidance.

5. There is no relationship between gender, ethnicity, and reasons to live.

6. There is no relationship between gender, ethnicity, attachment anxiety, and attachment avoidance and college student’s reasons to live when controlling for emotional autonomy.

7. There is no relationship between gender, attachment anxiety, attachment avoidance and subscales of the College Student Reasons for Living Inventory (i.e., Survival and Coping Beliefs, College and Future-Related Concerns, Moral Objections, Responsibility to Friends and Family, Fear of Suicide, Fear of Social Disapproval) when controlling for emotional autonomy.

Data Analysis

Pairwise relationships from a correlation matrix were used to examine Hypotheses 1 – 5. Stepwise multiple regression analysis was used to examine the relationships in Hypothesis 6. In stepwise regression, the performance of tests occurs at each step to determine the significance of each independent variable already in the equation as if it were the last to be entered. A reassessment of variables takes place at each step in the model to determine the contribution of each independent variable toward the dependant variable. Gender, ethnicity, attachment anxiety and attachment avoidance were used as independent variables with the total scale score of reasons to live as the dependant variable. Each factor of the Emotional Autonomy Scale was entered into the model as a covariate. Hypothesis 7 was analyzed using a factorial MANCOVA. Analysis for the research questions was tested at a .05 significance level. Additionally, basic
descriptive statistics including percentages and frequencies were calculated from the data
gathered from the self-report demographic questionnaire.

**Methodological Limitations**

It is important for researchers attempt to reduce error when making valid inferences from study data (Creswell, 2005). While survey design is useful and appropriate for this particular study, there are limitations to this type of research design. Potential limitations included coverage, sampling, and nonresponse error. Technological incompatibilities and social desirability bias was also considered within this study.

To reduce coverage and sampling error, there was a concerted effort to gain a large enough sample from the undergraduate student population. Although some nonresponse error was anticipated, every attempt was made to use rigorous procedures to encourage a large completion rate for the survey. Utilization of a survey included the possibility of participants misinterpreting items well as errors in item completion. Attempts to reduce the potential for these errors included using clear and concise questions and instructions and pilot testing the web-based survey for flow and ease of completion.

As this survey was administered online, there were limitations common to the web-based design of the survey. There was the possibility of the researcher having difficulty accessing current or active email addresses for potential participants. Although students enrolled full-time at the university must have an email address with the university’s server, students may check the account infrequently or may allow the mailbox to become full, limiting new emails. While all university students should be comfortable using computer-based technology, there are likely exceptions leading to fewer completed surveys.
Summary

The purpose of the current research study was to examine the relationship between experiences in close friendships (i.e., attachment anxiety and attachment avoidance), gender, ethnicity, and reasons to live in a diverse sample of college students. A sample of students was drawn from undergraduate courses and participants completed an on-line survey that included the Experiences in Close Relationships – Revised (ECR-R), the emotional autonomy subscale of the EAS, the College Student Reasons for Living Inventory (CSRLI), and demographic questions. Data was analyzed using Pearson Product Moment correlations, stepwise multiple regression, and a factorial MANCOVA. The results of the study are presented in Chapter Four. Conclusions drawn from the results are presented in Chapter Five.
CHAPTER 4
RESULTS

The results of surveys distributed to undergraduate students, aged 18 to 24, at a large southeastern public university are presented in this chapter. The survey assessed the participant’s experiences in close friendships, reasons to live, and emotional autonomy from his or her parents. This chapter reviews results of the data analyses and the demographic information.

Analysis of Instruments

A reliability analysis was conducted on each of the questionnaires used in this study prior to further analyzing any data or testing the hypotheses. Cronbach’s alpha, a measure of internal consistency, was calculated for each survey and subscales (i.e., Experiences in Close Relationships – Revised, the Emotional Autonomy subscale, and the College Student Reasons for Living Inventory) to confirm that each scale or subscale was internally consistent in measuring a particular construct. Previous studies have confirmed that the instruments used in this study were reliable and measured the identified constructs. As validity and reliability are not static, it is important to measure the concepts for this particular study and sample.

Cronbach’s alpha for the total scale of the Experiences in Close Relationships – Revised (ECR-R) was .95. The total alpha coefficient for the anxiety subscale of the ECR-R was .93 and was .95 for the avoidance subscale. The alpha coefficient for the Emotional Autonomy subscale was .83. A factor analysis also was conducted on the Emotional Autonomy subscale and the reliability of the Parents factor, Dependence factor and the Secret factor was .75, .73, and .58 respectively. This analysis is explained further in the following section. The total alpha coefficient for total scale, College Student Reasons for Living Inventory, was .95. The total alpha coefficients for each of the six subscales were as follows: Survival and Coping Beliefs .90;
Reliability coefficients are considered acceptable when they are above .70 (Schmitt, 1996). With the exception of one factor on the Emotional Autonomy subscale, all of the measures were above .70. Reliability analyses conducted for this study revealed alpha coefficients that are comparable to levels found in earlier studies for the ECR-R, CSRLI, and Emotional Autonomy (Beyers & Goossens, 2003; Fraley et al., 2000; Westefeld et al., 1996a; Westefeld et al., 1996b).

**Emotional Autonomy Scale Factor Analysis**

The Emotional Autonomy Scale (EA) (Steinberg & Silverberg, 1986) was modified for this study by using 12 of the 20 items contained in the original scale. Because the population group used in this study was different from group used in the original studies, it was determined that a factor analysis would be appropriate. Initial reliability analysis using a Cronbach alpha reliability coefficient for the total scale found three items negatively correlated with the total (items 4, 6, and 11) and needed to be reverse coded. After reversing the coding on these three items, a principal components factor analysis using a Varimax rotation was conducted. Three factors emerged from this analysis that accounted for 56% of the variance. The items loaded in a slightly different configuration than in the original EA scale. However, for the group of students participating in the current study, these items seemed to provide useful and meaningful factors, with each item loading on one and only one factors. Table 4-1 presents the factor loading for the items and the reliability for each of the factors.

The first factor consisted of four items with a Cronbach alpha of .75. The Parent factor measures students’ perceptions of their parents and how they might differ from their parents when they become parents. The second factor measured students’ dependence upon their parents and consisted of five items with a Cronbach alpha reliability coefficient of .73. The Dependence
factor inquired in what situations and how frequently, or how dependent students were on their parents’ opinions and help. The third subscale consisted of three items with a Cronbach alpha of .58. While the reliability coefficient for this factor is not as high, the items measure what students’ do not think their parents know about them.

Overall the reliability of the EA factors was not high which ultimately could have affected the outcome of the study. The wording of the scale may have contributed to the low reliability of the scale. As the measure was intended for young adolescents (i.e., high school age students), the scale questions included words such as “kids” which may have affected the participants’ perceptions of the questions. In addition, examination of the item-total correlations indicated that omitting one or more of the items would likely have improved the reliability of this measure.

Data Collection and Demographics

The sample was drawn from undergraduate students at a large southeastern university. An email invitation was sent to instructors of undergraduate courses taught within the College of Education. In turn, the instructors forwarded the invitation to his or her class for possible participation. The researcher was unaware of which instructors chose to forward the email to their classes. The researcher also recruited participants through the Department of Housing and Residence Education. After approval from IRB, the researcher met with the research coordinator to present the research. The research coordinator consented to support the research and sent the email invitation to all students residing in any residence hall on campus.

A total of 573 students participated in this study. Any participant that did not complete any of the instruments in entirety or did not meet inclusion criteria was eliminated from the sample. The final sample was comprised of 441 students. Table 4-2 reports percentages for the items on the demographic questionnaire. The majority of the sample was comprised female participants (n = 325; 73.7%) and 112 males (25.4%). Participants ranged in age from 18 to 24
The average age of respondents was 19.2 years old, and 37.9% (n=167) were 18 years of age, 32.2% (n=142) were 19 years of age, 11.8% (n=52) were 20 years of age, 10.4% (n=46) were 21 years of age, 4.8% (n=21) were 22 years of age, 0.9% (n=4) were 23 years of age, and 0.9% (n=4) were 24 years old. Five respondents did not report their age. The majority of the sample self-reported their race as White, Caucasian, or European-American, 71.7% (n=316) followed by 12.7% (n=56) Hispanic or Latina, 8.2% (n=36) Black, African-American or Caribbean-American, 5.4% (n=24) Asian-American or Pan-Asian American, 0.7% (n=3) Arab-American, and 0.2% (n=1) Native-American. Five respondents did not report their race. This sample roughly estimates the population at the university.

Participants were at various stages of their educational careers. The majority of the participants were in their first year of study, 55.6% (n=245). The remaining participants were in their second year, 18.8% (n=83), third year, 10.9% (n=48), fourth year, 12.2% (n=54), or fifth year or more, 1.6% (n=7). Four respondents did not report their year in school. All participants were currently enrolled at a large southeastern university. Over three-quarters of the sample (81.2%, n=358) reported living on campus, and 17.9% (n=79) lived off campus. Three respondents did not report their residence.

Descriptive Statistics

The survey used in this study was comprised of three established measures and a demographic questionnaire. The means, ranges, and standard deviations for each of the study variables are presented in Table 4-3. Because all of the participants who left items blank were eliminated, all items were accounted for. Any missing data occurred in the demographic questionnaire section.

For the anxiety attachment 18-item subscale of the ECR-R, scores ranged from 1 (strongly disagree) to 7 (strongly agree). The mean for anxiety attachment in relationship with
close friends was $M = 2.79$ (SD = 1.08). Higher scores on this scale indicate higher levels of anxiety within a relationship (i.e., insecurity of the availability or responsiveness of a friend in a close relationship). Fraley, Waller, & Brennan (2000) report the mean of anxiety attachment subscale in an overall sample of over 22,000 individuals (78% female and average age of 24 with SD = 10) as $M = 3.64$ with a standard deviation of SD = 1.33.

The scores of the 18-item avoidant attachment subscale of the ECR-R ranged from 1 (strongly disagree) to 7 (strongly agree). The mean score for avoidant attachment in relationship with close friends was $M = 2.89$ with a standard deviation of SD = 1.11. Higher scores on this scale indicate higher levels of avoidance, or discomfort of being close to a friend in a close friendship. Fraley, Waller, & Brennan (2000) report the mean of anxiety attachment subscale in an overall sample of over 22,000 individuals (78% female and average age of 24 with SD = 10) as $M = 2.93$ with a standard deviation of SD = 1.18.

Following factor analysis of the Emotional Autonomy scale, mean scores and standard deviations were determined for each identified factor. The first factor, Parent factor, had a mean score of $M = 2.21$ and SD = .56. The second factor, Dependence factor, had a mean score of $M = 2.12$ and .SD = .52 and the third factor, Secret factor, had a mean score of $M = 2.076$ and SD = .53. Scores on the Emotional Autonomy scale range from 1 (strongly disagree) to 4 (strongly agree). Higher scores on this scale indicated that the participant is emotionally autonomous from his or her parents. Authors of the EA scale, Steinberg and Silverberg (1986) did not factor analyze the scale so the mean scores do not fit with the subscale used in this study.

The 46-items of the CSRLI are scaled from not at all important (1) to extremely important (6). The total mean score for reasons to live was $M = 201.34$ with a standard deviation of SD = 38.27. Higher scores on the total scale indicate a person who perceives having more reasons to
live. The mean for the subscales were as follows (1) Survival and Coping Beliefs (SCB) M = 5.11 and SD = .79, (2) College and Future-Related Concerns (CFRC) M = 4.75 and SD = 1.10, (3) Moral Objections (MO) M = 3.93 and SD = 1.58, (4) Responsibility to Friends and Family (RFF) M = 4.84 and SD = 1.16, (5) Fear of Suicide (FS) M = 3.3 and SD = 1.5, and (6) Fear of Social Disapproval (FSD) M = 3.53 and SD = 1.29. Higher scores on subscales indicate that the theme of the subscale is important to the respondent. Findings of the current study are similar to the mean subscale scores of the CSRLI in a study conducted by the authors. Westefeld et al., (1996) reported mean subscale scores as SCB (M = 4.89, SD =1.04); CFRC (M = 4.49, SD = .99); MO (M = 3.70, SD = 1.32); RFF (M = 4.22, SD = 1.09); FS (M = 2.84; SD = .97); FSD (M = 2.89, SD = 1.01).

Data Analysis and Results of Hypothesis

The study’s first five hypotheses were tested using Pearson correlations (Table 4-4). Hypothesis six was tested using a multiple regression analysis (Table 4-5) and hypothesis seven was tested using a multiple analysis of covariance (MANCOVA) (Table 4-6).

Hypothesis 1: There is no relationship between college-aged students’ attachment anxiety and reasons to live.

To test this hypothesis a Pearson correlation was calculated for scores on the anxiety subscale of the ECR-R and the total scale score of the CSRLI. Table 4-4 presents the results of this analysis. There was a significant, negative association ($r = -.094, p = .049$) between college-aged students attachment anxiety and their reasons to live. The findings show that for most participants the less attachment anxiety he or she has regarding a close friendship, the more importance that he or she places on reasons to live. The null hypothesis is rejected for Hypothesis 1 because there is a significant relationship between college-aged student’s attachment anxiety and reasons to live.
**Hypothesis 2:** There is no relationship between college-aged students’ attachment avoidance and reasons to live.

To address this question a Pearson correlation was calculated for the scores on the avoidance subscale of the ECR-R and the total scale scores of the CSRLI. There was a significant, negative association ($r = -0.269, p < 0.0001$) (Table 4-4) between college-aged students attachment avoidance and their reasons to live. The findings show that for most participants the less attachment avoidance he or she has regarding a close friendship, the more importance that he or she places on reasons to live. The null hypothesis is rejected for Hypothesis 2 because there is a significant relationship between college-aged student’s attachment avoidance and reasons to live.

**Hypothesis 3:** There is no relationship between gender, ethnicity, and college-aged students’ attachment anxiety.

To address this question two separate Pearson correlations were calculated for gender, ethnicity, and the scores on the anxiety subscale of the ECR-R. There was a non-significant association between gender and college-aged student’s attachment anxiety ($r = -0.079, p = 0.100$). The association between ethnicity and attachment anxiety was also non-significant ($r = 0.033, p = 0.493$) (Table 4-4). The null hypothesis was not rejected for Hypothesis 3 because there was no significant association between gender, ethnicity, and attachment anxiety.

**Hypothesis 4:** There is no relationship between gender, ethnicity, and college-aged students’ attachment avoidance.

To address this question two separate Pearson correlations were calculated for gender and ethnicity with the scores on the avoidance subscale of the ECR-R. There was a non-significant association between gender and college-aged student’s attachment avoidance ($r = -0.081, p = 0.493$)
The association between ethnicity and attachment avoidance was also non-significant ($r = -0.020, p = .680$) (see Table 4-4). The null hypothesis was not rejected for Hypothesis 4 because there was no significant association between gender, ethnicity, and attachment avoidance.

**Hypothesis 5**: There is no relationship between gender, ethnicity, and reasons to live.

To address this question two separate Pearson correlations were calculated for gender, ethnicity, and the total scale scores on CSRLI. There was a significant, positive relationship between gender and the total scale scores on the CSRLI ($r = .187, p < .0001$) (Table 4-4). The association between ethnicity and the total scale scores on the CSRLI were, however, non-significant ($r = -.029, p = .550$). The null hypothesis was not rejected for Hypothesis 5.

**Hypothesis 6**: There is no relationship between gender, ethnicity, attachment anxiety, and attachment avoidance and college student’s reasons to live when controlling for emotional autonomy.

Testing of Hypothesis 6 included a stepwise multiple regression analysis to determine if gender, ethnicity, attachment anxiety, and attachment avoidance were significantly related to college student’s reason to live when controlling for emotional autonomy. The stepwise multiple regression analysis calculated all variables and determined a model with the best fit. All variables, except the Emotional Autonomy variables, were entered into the regression model including the dependant variables (i.e., CSRLI total scale scores and the subscales) during the initial analysis. Then the Emotional Autonomy variable was entered into the model to see if emotional autonomy accounted for any difference. The model that best predicted the total scale scores on the CSRLI included attachment avoidance, gender, and the Dependence factor of the Emotional Autonomy scale. Regression results indicated that the model significantly predicted reasons to live, $R = .438, R^2 = .192, R^2_{adj} = .186, (F(1, 430)) = 48.508, p = .000$. Inspection of the
beta weights as seen in Table 4-5 indicated that attachment avoidance, gender, and the dependence factor made a significant contribution to the model and accounted for 19.2% of the variance in reasons to live. Attachment avoidance explained 7.4% of the variance in reasons to live. Adding gender into the model explained 2.6% and the dependence factor explained another 9.1%. Although attachment avoidance, gender, and the dependence factor on the EA scale accounted for a significant amount of variance in reasons to live scores, the three variables accounted for approximately 19% of the variance, meaning that there is an unknown variable or variables that were not included in the study that account for additional variance.

Table 4-6 presents the model summary for the stepwise multiple regression analysis. As indicated in the table, attachment avoidance, gender, and the dependence factor were significant predictors of reasons to live accounting for 19.2% of the variance.

**Hypothesis 7**: There is no relationship between gender, ethnicity, attachment anxiety, attachment avoidance and subscales of the College Student Reasons for Living Inventory (i.e., Survival and Coping Beliefs, College and Future-Related Concerns, Moral Objections, Responsibility to Friends and Family, Fear of Suicide, Fear of Social Disapproval) when controlling for emotional autonomy.

Hypothesis 7 was answered by conducting a multiple analysis of covariance (MANCOVA) using the six subscales of the College Student Reasons for Living Inventory as the dependant variables. After conducting the regression analysis, a choice was made to use the dependence factor as a covariate instead of the total scores on the Emotional Autonomy scale. The Box’s Test of Equality of Covariance Matrices was not significant indicating the use of the Wilkes Lambda Multivariate test. Gender and ethnicity were the only two variables that were significant
following this analysis. Table 4-6 presents the results of the Wilkes Lambda test for Gender and Ethnicity.

Levene’s Test of Equality of Error Variance tests the hypothesis that the error variance of the dependent variable is equal across groups. The results show that the dependent variables (i.e., scores on the subscales of the CSRLI) are significant and range in scores from \( p = .006 \) to \( p = .622 \). The results of this test indicate that the results of the following tests can be interpreted with confidence.

To understand the effects of each independent variable on the dependent variable, a test of between-subjects effects was conducted. The results indicated that there were main effects between gender and the Responsibility to Friends and Family (RFF) subscale, \( F(1) = 6.293, p = .012 \), as well as Fears of Suicide (FS) subscale \( F(1) = 22.22, p < .0001 \). There were also main effects between ethnicity and the Moral Obligations (MO) subscale, \( F(3) = 7.445, p < .0001 \), and the College and Future Related Concerns (CFRC) subscale, \( F(3) = 2.823, p = .039 \).

A two-way MANCOVA was conducted to determine the effect of gender and ethnic group on survival and coping beliefs, college and future-related concerns, moral obligations, responsibility to friends, fear of suicide, and fear of social disapproval while controlling for attachment anxiety, attachment avoidance and the dependence factor. The main effects of gender (Wilks \( \lambda = .919 \), \( F(6, 418) = 6.13, p < .001 \), multivariate \( h^2 = .081 \)) and ethnic group (Wilks \( \lambda = .914 \), \( F(18, 1182.768) = 2.12, p < .004 \), multivariate \( h^2 = .030 \)) indicate a significant effect on the combined dependent variable. The interaction of gender and ethnic group was non-significant. The anxiety covariate significantly influenced the combined dependent variable (Wilks \( \lambda = .913 \), \( F(6, 418) = 6.675, p < .001 \), multivariate \( h^2 = .087 \)). The avoidance covariate significantly influenced the combined dependent variable (Wilks \( \lambda = .934 \), \( F(6, 418) = 4.890, p < .001 \),
multivariate \( h^2 = .066 \) and the dependence covariate variable significantly influenced the combined dependent variable (Wilks \( l = .861 \), \( F (6, 418) = 611.260, p<.001 \), multivariate \( h^2 = .139 \)).

Univariate ANOVA results indicated only the dependent variable of Fear of Suicide (FS) was significantly effected by gender by ethnic group interaction (\( F (3, 432) = 3.000, p<.001 \), partial \( h^2 = .021 \)). The main effect of gender affected the dependent variable of Responsibility to Friends and Family (RFF) (\( F (1, 433) = 6.293, p=.012 \), partial \( h^2 = .015 \)) and FS (\( F (1, 433) = 22.229, p<.001 \), partial \( h^2 = .050 \)). The main effect of ethnic group affected the dependent variables of College and Future-Related Concerns (\( F (3, 431) = 2.823, p=.039 \), partial \( h^2 = .020 \)) and Moral Obligations (\( F (3, 431) = 7.455, p<.001 \), partial \( h^2 = .050 \)). Table 4-7 illustrates how the covariates of Attachment Anxiety, Attachment Avoidance, and the Dependence factor affected the dependent variables of Survival and Coping Beliefs, College and Future Related Concerns, Moral Obligations, Responsibility to Friends and Family, Fear of Suicide, and Fear of Social Disapproval. As illustrated in the Table, the covariates were influential on the dependent variables. Tables 4-8 and 4-9 present the unadjusted and adjusted means for the variables.

**Summary**

In this chapter, the results of a survey distributed to college aged males and females attending a large southeastern university were presented. Descriptive statistics for the study’s research variables and correlations between the variables were presented. The research questions were addressed by providing an explanation of the results of the data analysis. In chapter five, the results will be discussed with attention paid to the study limitations and implications for theory, and counseling practice. Recommendations for future research will also be presented.
Table 4-1. Factor Loadings for Emotional Autonomy Scale (12 Items)

<table>
<thead>
<tr>
<th>Item</th>
<th>Parent</th>
<th>Dependence</th>
<th>Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. There are things that I will do differently from my mother and father when I become a parent (R)</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. When I become a parent, I’m going to treat my children in exactly the same way that my parents have treated me.</td>
<td></td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>12. My parents hardly ever make mistakes.</td>
<td></td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>1. My parents and I agree on everything.</td>
<td></td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>5. When I’ve done something wrong, I depend on my parents to straighten things out for me.</td>
<td></td>
<td>.72</td>
<td></td>
</tr>
<tr>
<td>2. I go to my parents for help before trying to solve a problem myself.</td>
<td></td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>3. When my parents and I disagree, my parents are always right.</td>
<td></td>
<td>.64</td>
<td></td>
</tr>
<tr>
<td>8. I try to have the same opinions as my parents.</td>
<td></td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>9. If I was having a problem with one of my friends, I would discuss it with my mother or father before decide what to do about it.</td>
<td></td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>6. There are some things about me that my parents don’t know. (R)</td>
<td></td>
<td></td>
<td>.88</td>
</tr>
<tr>
<td>7. My parents know everything there is to know about me.</td>
<td></td>
<td></td>
<td>.79</td>
</tr>
<tr>
<td>4. It’s better for kids to go to their best friends that to their parents for advice on some things. (R)</td>
<td></td>
<td></td>
<td>.31</td>
</tr>
<tr>
<td>Reliability</td>
<td>.75</td>
<td>.73</td>
<td>.58</td>
</tr>
<tr>
<td>Variable</td>
<td>Frequency (f)</td>
<td>Percentage (%)</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>---------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>112</td>
<td>25.4</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>325</td>
<td>73.7</td>
<td></td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>167</td>
<td>37.9</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>142</td>
<td>32.2</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>52</td>
<td>11.8</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>46</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>21</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>4</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>4</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White, Caucasian, or European-American</td>
<td>316</td>
<td>71.7</td>
<td></td>
</tr>
<tr>
<td>Black, African-American, or Caribbean-American</td>
<td>36</td>
<td>8.2</td>
<td></td>
</tr>
<tr>
<td>Hispanic or Latina</td>
<td>56</td>
<td>12.7</td>
<td></td>
</tr>
<tr>
<td>Native-American</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Arab-American</td>
<td>3</td>
<td>0.7</td>
<td></td>
</tr>
<tr>
<td>Asian-American or Pan-Asian American</td>
<td>25</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td><strong>Year in School</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First</td>
<td>245</td>
<td>55.6</td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>83</td>
<td>18.8</td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td>48</td>
<td>10.9</td>
<td></td>
</tr>
<tr>
<td>Fourth</td>
<td>54</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>Fifth or More</td>
<td>7</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On Campus</td>
<td>358</td>
<td>81.2</td>
<td></td>
</tr>
<tr>
<td>Off Campus</td>
<td>79</td>
<td>17.9</td>
<td></td>
</tr>
</tbody>
</table>
Table 4-3. Descriptive Statistics for the Study’s Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Range</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attachment Anxiety</td>
<td>2.795</td>
<td>1</td>
<td>6.5</td>
</tr>
<tr>
<td>Attachment Avoidance</td>
<td>2.888</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Survival and Coping Beliefs (SCB)</td>
<td>5.111</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>College and Future Related Concerns (CFRC)</td>
<td>4.746</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Moral Objections (MO)</td>
<td>3.927</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Responsibility to Family and Friends (RFF)</td>
<td>4.845</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Fear of Suicide (FS)</td>
<td>3.309</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Fear of Social Disapproval (FSD)</td>
<td>3.530</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Parent Factor (EA One)</td>
<td>2.208</td>
<td>1</td>
<td>3.75</td>
</tr>
<tr>
<td>Dependence Factor (EA Two)</td>
<td>2.120</td>
<td>1</td>
<td>3.80</td>
</tr>
<tr>
<td>Secret Factor (EA Three)</td>
<td>2.076</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4-4. Pearson Product Moment Correlations among the Study’s Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>ANX</th>
<th>AVOID</th>
<th>Gender</th>
<th>Ethnicity</th>
<th>CSRLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVOID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>-.079</td>
<td>-.081</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.033</td>
<td>.493</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSRLI</td>
<td>-.094*</td>
<td>-.269**</td>
<td>.187**</td>
<td></td>
<td>-.029</td>
</tr>
</tbody>
</table>

Note: *p < .05 (two-tailed), ** p < .01 (two-tailed), N = 441, ANX = Attachment Anxiety, AVOID = Attachment Avoidance, CSRLI = College Students Reasons for Living Inventory (total scale score)

Table 4-5. Final Model Coefficients for Reasons to Live for College-Aged Students

<table>
<thead>
<tr>
<th>B</th>
<th>B</th>
<th>t</th>
<th>p</th>
<th>Bivariate r</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Att. Avoid.</td>
<td>-0.435</td>
<td>-0.220</td>
<td>-5.008</td>
<td>.000</td>
<td>-0.272</td>
</tr>
<tr>
<td>Gender</td>
<td>12.757</td>
<td>.146</td>
<td>3.354</td>
<td>.001</td>
<td>.183</td>
</tr>
<tr>
<td>Dependence</td>
<td>4.532</td>
<td>.305</td>
<td>6.965</td>
<td>.000</td>
<td>.344</td>
</tr>
</tbody>
</table>

Table 4-6. Reasons to Live Model for College Aged Students

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R²</th>
<th>R² adj</th>
<th>R² chg</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.272</td>
<td>.074</td>
<td>.072</td>
<td>.074</td>
<td>34.643</td>
<td>1</td>
<td>432</td>
<td>.000</td>
</tr>
<tr>
<td>2</td>
<td>.317</td>
<td>.100</td>
<td>.096</td>
<td>.026</td>
<td>12.485</td>
<td>1</td>
<td>431</td>
<td>.000</td>
</tr>
<tr>
<td>3</td>
<td>.438</td>
<td>.192</td>
<td>.186</td>
<td>.091</td>
<td>48.508</td>
<td>1</td>
<td>430</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: a Predictors: Attachment Avoidance (Att. Avoid.); b Predictors: Att. Avoid., Gender; c Predictors: Att. Avoid., Gender, Dependence; d Dependent Variable: CSRLI total scale score
Table 4-7. Effects of Covariates on Dependent Variables

<table>
<thead>
<tr>
<th>Covariate</th>
<th>Dependent</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>SCB</td>
<td>$F(1, 432) = 9.179, \ p = .003, \ \text{partial} \ h^2 = .021$</td>
</tr>
<tr>
<td></td>
<td>CFRC</td>
<td>$F(1, 432) = 1.488, \ p = .223, \ \text{partial} \ h^2 = .004$</td>
</tr>
<tr>
<td></td>
<td>MO</td>
<td>$F(1, 432) = 5.822, \ p = .016, \ \text{partial} \ h^2 = .014$</td>
</tr>
<tr>
<td></td>
<td>RFF</td>
<td>$F(1, 432) = 1.311, \ p = .253, \ \text{partial} \ h^2 = .003$</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>$F(1, 432) = 7.978, \ p = .005, \ \text{partial} \ h^2 = .019$</td>
</tr>
<tr>
<td></td>
<td>FSD</td>
<td>$F(1, 432) = 10.989, \ p = .001, \ \text{partial} \ h^2 = .025$</td>
</tr>
<tr>
<td>Avoidance</td>
<td>SCB</td>
<td>$F(1, 432) = 17.827, \ p &lt; .000, \ \text{partial} \ h^2 = .040$</td>
</tr>
<tr>
<td></td>
<td>CFRC</td>
<td>$F(1, 432) = 17.082, \ p &lt; .000, \ \text{partial} \ h^2 = .039$</td>
</tr>
<tr>
<td></td>
<td>MO</td>
<td>$F(1, 432) = 7.881, \ p = .005, \ \text{partial} \ h^2 = .018$</td>
</tr>
<tr>
<td></td>
<td>RFF</td>
<td>$F(1, 432) = 19.040, \ p &lt; .000, \ \text{partial} \ h^2 = .043$</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>$F(1, 432) = 0.242, \ p = .623, \ \text{partial} \ h^2 = .001$</td>
</tr>
<tr>
<td></td>
<td>FSD</td>
<td>$F(1, 432) = 4.167, \ p = .033, \ \text{partial} \ h^2 = .011$</td>
</tr>
<tr>
<td>Dependence</td>
<td>SCB</td>
<td>$F(1, 432) = 4.556, \ p = .003, \ \text{partial} \ h^2 = .021$</td>
</tr>
<tr>
<td></td>
<td>CFRC</td>
<td>$F(1, 432) = 7.526, \ p = .006, \ \text{partial} \ h^2 = .017$</td>
</tr>
<tr>
<td></td>
<td>MO</td>
<td>$F(1, 432) = 47.616, \ p &lt; .000, \ \text{partial} \ h^2 = .101$</td>
</tr>
<tr>
<td></td>
<td>RFF</td>
<td>$F(1, 432) = 24.932, \ p &lt; .000, \ \text{partial} \ h^2 = .056$</td>
</tr>
<tr>
<td></td>
<td>FS</td>
<td>$F(1, 432) = 26.689, \ p &lt; .000, \ \text{partial} \ h^2 = .059$</td>
</tr>
</tbody>
</table>

Table 4-8. Unadjusted and Adjusted Means by Gender

<table>
<thead>
<tr>
<th></th>
<th>Male Unadjusted</th>
<th>Male Adjusted</th>
<th>Female Unadjusted</th>
<th>Female Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB</td>
<td>49.750</td>
<td>51.175</td>
<td>51.428</td>
<td>52.175</td>
</tr>
<tr>
<td>CFRC</td>
<td>45.107</td>
<td>47.538</td>
<td>48.114</td>
<td>49.910</td>
</tr>
<tr>
<td>MO</td>
<td>21.607</td>
<td>24.084</td>
<td>24.102</td>
<td>25.936</td>
</tr>
<tr>
<td>RFF</td>
<td>35.750</td>
<td>36.081</td>
<td>39.673</td>
<td>39.730</td>
</tr>
<tr>
<td>FSD</td>
<td>17.285</td>
<td>17.117</td>
<td>17.754</td>
<td>18.047</td>
</tr>
</tbody>
</table>

Table 4-9. Unadjusted and Adjusted Means by Ethnic Group

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB</td>
<td>52.194</td>
<td>52.986</td>
<td>50.873</td>
<td>50.391</td>
<td>52.036</td>
<td>52.049</td>
<td>51.035</td>
<td>51.273</td>
</tr>
<tr>
<td>CFRC</td>
<td>50.638</td>
<td>50.799</td>
<td>46.479</td>
<td>45.914</td>
<td>49.509</td>
<td>49.511</td>
<td>48.500</td>
<td>48.672</td>
</tr>
<tr>
<td>RFF</td>
<td>38.944</td>
<td>38.635</td>
<td>38.625</td>
<td>37.873</td>
<td>40.034</td>
<td>39.206</td>
<td>36.000</td>
<td>35.908</td>
</tr>
<tr>
<td>FSD</td>
<td>18.833</td>
<td>18.658</td>
<td>17.600</td>
<td>17.594</td>
<td>17.563</td>
<td>17.676</td>
<td>16.607</td>
<td>16.399</td>
</tr>
</tbody>
</table>
CHAPTER 5
DISCUSSION

Examining factors that contribute to reasons to live in college-aged students will guide theory, practice, and research. The goal of the present study was to explore factors associated with experiences in close friendships and reasons to live in college-aged students attending a large southeastern university. In this chapter, the study design is reviewed and the findings are discussed. Limitations of the study are included as well as a discussion of implications of the findings for theory and counseling practice. Finally, recommendations for future research are presented.

Overview of the Study and Discussion of Findings

This study of college-aged students included 441 participants, 325 (73.7%) female and 112 (25.4%) male, who ranged in age from 18 to 24 and were predominantly White/Caucasian (71.7%). All of the students attended a large university in the southeastern United States. Over half of the participating students (55.6%) reported being in their first year of study at the university and over three quarters (81.2%) reported living in residence halls on campus. Each participant completed a survey comprised of instruments measuring (1) experiences in close friendships, (2) emotional autonomy, (3) reasons to live, and (4) a demographic questionnaire. Scores were computed for each of the study variables, allowing for analysis of the relationships between the variables. A non-experimental, correlational design was utilized to test the research hypotheses. All hypotheses were stated in the null form and tested at a .05 significance level.

Attachment and Reasons to Live

The first hypothesis concerned the association between attachment anxiety and reasons to live. The Pearson Product Moment correlation indicated a significant, inverse correlation
between scores on the anxiety subscale of the Experiences in Close Relationships – Revised scale and the total scale scores on the College Student Reasons for Living Inventory suggesting that college students who were more anxious, or less secure, in their perception of a close friends’ responsiveness to them reported less reasons to live. The inverse relationship indicates that the less anxious a person is within a friendship the more he or she reported reasons to live. The strength of this correlation also is important because it further suggests that subscale scores on the CSRLI (e.g., Survival and Coping Beliefs, College and Future-Related Concerns, Responsibility to Friends and Family, Moral Obligations, Fear of Suicide, Fear of Social Disapproval) may account for stronger associations between attachment anxiety and reasons to live than using the total scale score.

The second hypothesis addressed the association between attachment avoidance and reasons to live. The Pearson Product Moment correlation indicated a significant, inverse relationship between scores on the avoidance subscale of the Experiences in Close Relationships – Revised scale and the total scale scores on the College Student Reasons for Living Inventory suggesting that college students who are less comfortable with closeness or intimacy in their friendships reported less reasons to live. The inverse suggests that the person who is more comfortable with being close to a friend also reported more reasons to live.

Previous research has linked attachment patterns of young adults, reasons for living, and suicide. In a study conducted on college-age students and reasons for living, Buelow et al. (2000) found that a secure pattern of attachment (i.e., equivalent to low anxiety and low avoidance scores on the ECR-R) inversely predicted suicidal thoughts and behaviors. The current research supports these general findings although Buelow et al. used a different measure of attachment (i.e., Attachment and Object Relations Inventory, AORI, Buelow, McClain, & McIntosh, 1996).
The findings in this study are supported by prior research but also make additional contributions to knowledge of attachment theory and college student development. College students who feel that their friends are responsive to their needs and are comfortable being close to friends reported more reasons to live. The relationship between attachment and reasons to live suggests that close friendships are important to college students. Because attachment anxiety is a measure of how the student views the self in addition to the perception of a friends’ responsiveness, the findings also suggest that a person who has a more positive sense of self has more reasons to live. Conversely attachment avoidance also is a measure of how a student perceives himself within friendships and how the student views himself within the world. If high scores of attachment avoidance are inversely related to reasons to live, this suggests that a student who has a negative view of self in relationships (i.e., how he or she compares or relates self with others) also perceives having fewer reasons to live.

**Gender, Ethnicity and Attachment**

The third hypothesis considered the association between attachment anxiety and demographic variables (i.e., gender and ethnicity). The Pearson Product Moment correlation indicated that neither gender nor ethnicity was significantly associated with attachment anxiety. Though non-significant, attachment anxiety was inversely associated with gender while ethnicity was positively associated with attachment anxiety. Both gender and ethnicity were weakly associated with attachment anxiety suggesting that neither variable was closely related to change in attachment anxiety scores.

The associations between attachment avoidance and gender and ethnicity were addressed in the fourth hypothesis. Pearson Product Moment correlations indicated that gender and ethnicity were not significantly associated with attachment avoidance. Ethnicity was positively associated with attachment avoidance while gender was inversely associated with attachment
avoidance. Both gender and ethnicity were weakly associated with attachment avoidance suggesting that neither variable was closely related to change in attachment avoidance scores.

These findings are consistent with attachment theorists proposition that attachment is a universal concept (Bowlby, 1969, 1982/1988), that is, attachment patterns are not related to individual differences such as gender or ethnicity. Attachment formation begins in infancy and is based on the interaction first between a child and it’s caregiver and later on peer and romantic relationships. As the process of bonding with a caregiver or person of importance appears to be universal, there are no significant findings that either gender or ethnicity contributes to adult attachment patterns. A review of mean scores by gender on the anxiety and avoidance subscale indicated that males and females have similar scores supporting the concept that gender also does not influence attachment patterns (Fraley, Waller, & Brennan, 2000). Although attachment patterns are not significantly related to gender and ethnicity in this study, the lack of findings could be explained by a lack of fully developed attachment relationships with peers within the sample.

**Gender, Ethnicity, and Reasons to Live**

The fifth hypothesis considered the association between reasons to live as measured by the total scale score on the CSRLI and gender as well as ethnicity. The Pearson Product Moment correlation showed a significant, positive relationship between gender and reasons to live, suggesting that a persons’ gender has an association with reasons to live. The association between ethnicity and reasons to live was a non-significant inverse one. The findings are supported by a study conducted by the authors of the CSRLI to attain additional psychometric information following the creation of the scale (Westefeld, Badura, Kiel, & Scheel, 1996). Females were found to endorse reasons for living “more strongly than males” (Westefeld et al., 1996, p. 349).
Ethnicity of the student was not a significantly correlated with the total scale score of the CSRLI. The findings suggest that the students’ ethnicity did not influence their report of reasons to live. Although ethnicity was not significant in influencing the total number of reasons to live, further examination of the variables revealed that ethnicity does influence specific themes of reasons to live (i.e., the subscales scores of the CSRLI).

Factors Related to Reasons to Live

Hypothesis six was addressed using stepwise multiple regression analysis. A model that significantly accounted for variance in reasons to live was derived from entering all of the independent variables into the analysis. The final model included attachment avoidance, gender, and the dependence factor of the Emotional Autonomy Scale as the independent variables that together accounted for 19.2% of the variance in the model, suggesting that this combination of independent variables significantly predicted reasons to live.

Attachment avoidance (i.e., the extent to which person feels comfortable being close to an attachment figure) together with gender, and dependence on parents predicted participants’ reports of reasons to live. This finding suggests that the college-aged students who are comfortable turning to a significant person for help during times of need reported more reasons to live. In the derived model that best predicted reasons to live, participants reported depending on their parents during times of need as indicated by scores on the Dependence factor of the EA scale. Although the inclusion of the Dependence factor in the model suggests that participants were not emotionally autonomous from their parents, an interpretation that is consistent with this finding is that students continued to be comfortable turning to a parent as an attachment figure, when needed. In this study, high dependence on parents predicted reasons to live suggesting that students who perceived a connection to a parent who is always responsive to them also had more reasons to live.
Attachment avoidance was measured by asking the students to consider their relationships with their friends. The findings indicated that students reported being close to their friends, which supports, proximity seeking (i.e., seeking closeness), an important tenet of attachment theory, further implying that students who feel comfortable being close to a friend have more reasons to live. Students who are comfortable with proximity may feel safe in their friend’s presence and be reassured by their friendship and self within the context of the friendship, thus, influencing reasons to live.

The best-fit model included attachment avoidance as a predictor of reasons to live, but not attachment anxiety. While these findings were not anticipated, the combination of attachment avoidance, gender, and dependence on parents was the best fit for the sample used in the study. The researcher expected to find that both attachment anxiety and attachment avoidance were predictors of reasons to live. Attachment anxiety is the view of a friends’ responsiveness within a friendship (Fraley et al., 2000). Attachment avoidance fits with the earlier stages of attachment figure transition, while attachment anxiety is related to the students’ perception of a friends’ responsiveness. A student with more attachment anxiety may be more tentative with perceptions of friends, which may be ultimately related to sense of self, suggesting that the students in this study are learning about themselves and how they fit into the world.

Dependence on parents in this study may be explained by the age of the participants and their ongoing developmental transition to emotional autonomy. Fraley and Davis (1997) reported that the transition from parental attachment to other adult attachments occurred in stages. Proximity seeking is transferred from parents to peers first, followed by the safe-haven component (i.e., physical contact, reassurance and safety), and lastly, the secure-base component (i.e., the perception that an attachment figure can always be accessed in times of need) (Fraley &
Davis, 1997). The secure-base component takes the longest to attain within a friendship and occurs with the development and length of the friendship. The findings of this study suggest that the students have likely begun to transfer proximity seeking and the safe-haven component to their friendships (i.e., attachment avoidance), but have not yet relinquished a view of their parents as a secure base.

While attachment avoidance, gender, and dependence on parents accounted for significant variance in the model, the remaining unexplained variance suggests that a variable or variables that affected student’s reasons to live was not measured in this study. Future research is needed to clarify further relationships between attachment and reasons to live.

Factors Related to Subscales of CSRLI, Themes of Reasons to Live

The seventh hypothesis was examined using a Multiple Analysis of Covariance (MANCOVA). Gender, Ethnicity, Dependence factor, Attachment Anxiety and Attachment Avoidance were used as covariates. Findings of this study indicated that only the effects of gender and ethnicity on themes related to reasons to live (i.e., subscales of the CSRLI) were significant, meaning that attachment anxiety and avoidance did not have any effect on the themes related to reasons to live.

Results of a between-subjects test showed that there were main effects between gender and the Relationship to Friends and Family subscale (RFF) as well as the Fear of Suicide subscale (FS). This finding suggests that females in this study endorsed their relationships to friends and family and fears of suicide as being more important as reasons to live than did males. Westefeld et al. (1996) also found that females endorsed both the RFF and FS subscales at a higher level than males. The finding of this study is consistent with prior reports that women have a greater fear of death or injury than men, and men have a greater fear of social disapproval related to suicide (Rich, Kirkpatrick-Smith, Bonner, & Jans, 1992).
While prior research has reported that gender affects differences in rates of suicide, these findings suggest that gender differences influenced what males and females viewed as important reason to live. Women are socialized to be nurturing and to put others before themselves, which is consistent with the findings that relationships with friends and family are important as reasons to live. Fear of Suicide is related to the fear of the act of suicide including the pain that can be associated with an act of suicide or the experiences of attempting and failing. A woman placing more importance on Fear of Suicide is consistent with a societal stereotype that women avoid painful or unpleasant situations.

Results of the same between-subjects test showed that there were main effects between Ethnicity and the Moral Obligations subscale (MO) and College and Future-Related Concerns subscale (CRFC). Therefore, ethnicity appeared to influence persons’ endorsement of moral obligations and future concerns as reasons to live. More specifically, African-American participants rated both moral obligations and college and future concerns as more important than did other represented ethnic groups. The Moral Obligations subscale focused on a person’s religious and spiritual beliefs towards suicide. Importance placed on moral obligations to suicide suggests that the African-American participants connected with a religious or spiritual point of view. Levine (2008) found that one of the most important protective factors for suicide in college students were spiritual beliefs and practices that were well developed. By placing more importance on College and Future-Related Concerns, the African-American participants also appeared to value the college experience more than the other ethnic groups in this study. These findings could suggest that the college experience and the implications for the student may be critical to working with African-American students. Rates of suicide for African-American men and women are consistently less than their Caucasian counterparts (CDC, 2008).
If women are consistently endorsing more total reasons to live using the CSRLI than are men, it may mean that women are more comfortable expressing details about themselves and subsequently asking for help. Findings from this study supported this gender difference, but also suggested that men and women differ in what reasons to live they identify as more important. Westefeld, Whitchard, & Range (1990) reported that female undergraduate students are more likely to seek help than their male counterparts. A report from one of two counseling centers affiliated with the institution where the study was conducted confirms this. In 2005 – 2006, 61.8% of the clients who presented for services were women.

Limitations of the Study

The limitations of the present study should be discussed before addressing direction for future research. Although the overall results of this study may be generalizable to college-aged students in predominantly White/Caucasian institutions in the southeastern United States, the findings should be interpreted within the context of this study. Limitations of this study included sampling procedures, self-reporting, and data-collection techniques. A convenience sample was utilized in this study. Participants were recruited through undergraduate courses and through the Department of Housing at the institution, which made self-selection a possible bias in this study.

The correlational design of the study means that causation cannot be implied. Therefore, findings concerning the relationships between the variables may have been influenced by other variables not measured in this study. The use of self-report measures can be a limitation of the study, as the accuracy of the responses can never be known. Social desirability biases also could have influenced the participants’ responses. Use of the Internet and email for distribution of the survey makes the responses anonymous, but also makes it impossible for this researcher to know if the person who participated was the same person to whom the invitation was sent.
A large percentage of the sample were first year students (55.6%) and were 18-years-old (37.9%). The experiences of first year college students may be different for those in upper-levels in terms of the developmental challenges that lead them into adulthood. Because many first-year students have recently moved away from home and may still be dependent on their families, it is logical to conclude that they may not yet be emotionally autonomous from their parents.

Emotional autonomy is an important construct in college student development (Chickering & Reisser, 1993) and can affect a student’s ability to form attachments to other individuals than their parents. A student’s dependence on a parent is indicative that they view their parent as an attachment figure. Through gaining emotional autonomy from a parent, students may begin to form attachment relationships with their peers.

The composition of the sample obtained for this study was made up mostly of students who live on campus. Having a large percentage of the sample living in residence halls could be another limitation of this study. Individuals that live in residence halls are encouraged to participate in living and learning communities as a part of their experience. These students are introduced to campus resources whereas students that live off campus may not be exposed as readily to available resources. Living on campus may aid in delaying emotional autonomy in contrast to living off campus, which may hasten a student becoming more autonomous (e.g., paying bills, negotiating roommate conflicts without help, transportation, etc).

The low reliability correlations of the Emotional Autonomy factors indicated a likelihood of measurement error that could have affected the outcome of the study. The small $R^2$ in the present study suggests that other factors or constructs contribute to college-aged students’ reasons to live. This study examined gender, ethnicity, and the attachment relationship in close
friendships as having an association with reasons to live. Many other influences could predict reasons to live warranting further investigation.

**Implications for Theory and Practice**

Implications for both theory and practice are discussed in the following sections. Findings are reviewed through Attachment theory and College Student Development frameworks. Special consideration is also given to reasons to live as a theoretical construct as well as a practical strength-based measure of suicide ideation and risk.

**Implications for Theory**

The theoretical framework used in this study was attachment theory, college student development theory, and reasons to live. Attachment theory offers an explanation for a person’s view of self in relation to others. College students are beginning to build new relationships with people outside of their families and develop their adult identities. Friendships formed during the college years become critical in adult attachment, or understanding self and self in relation to others.

Attachment theory also explains the importance of identifying a person to turn to in times of crisis or need. This attachment figure is significant and typically begins as a caregiver, transitions through childhood to a peer friendship, and ultimately, in adulthood, a partner or spouse. Because friendships have been shown to be protective in college student adjustment, there was an expectation by this researcher that college students’ suicide might be mitigated by positive attachment experiences in close friendships. The findings of this study supported this theory by demonstrating a connection between attachment anxiety and reasons to live as well as attachment avoidance and reasons to live. According to attachment theory, individuals who are highly anxious and avoidant within close relationships are insecure in their attachment patterns. People who have an insecure attachment pattern view themselves more negatively than those
who are less anxious and avoidant and have been shown to have higher rates of suicide (Adam et al., 1996; Allen et al., 2001; Diamond et al., 1999; Gormley, 2004; Lessard & Moretti, 1998; Wright et al., 2005). The findings of this study confirm that a student’s support system is critically important in understanding who they are and ultimately working with them on being successful in life.

The majority of research that connects attachment theory to suicide has utilized inpatient and specific populations (e.g., adolescents and women) with established mental health diagnoses. This research study adds to this literature by supporting a connection between attachment theory and suicide with a non-clinical population. Studying college-aged students not only allows for understanding a non-clinical population, but also promotes learning about the unique concerns that students endure throughout this important part of their development and transition into adulthood.

One of the tenets of college student development suggests that individual’s transition from dependence on parents to emotional autonomy (Chickering & Reisser, 1993). Students that are more dependent on their parents may turn to them for aid in times of trouble or when they are feeling out-of-control which is related to their overall reasons to live. Attachment theory posits that a person in crisis seeks the safety or security of an attachment figure. Consideration of the two theories together suggests that when students depend primarily on their parents, they may not yet have begun to think of their peers as attachment figures.

A model was found in this study that suggested a combination of attachment avoidance (i.e., level of comfort with being close to another person) and dependence on parents along with gender could significantly account for predicting reasons to live. This suggests there is a need to consider the transition of attachment patterns in concert with a college-student’s development.
into adulthood. The transition of attachment patterns from a student’s parents to peers in some ways parallels other developmental processes including transitioning from dependence to emotional autonomy. Because the variables of attachment avoidance and dependence were found to predict reasons to live, it is important to study attachment patterns in college students to fully understand the transitions that occur during the development into adulthood. Understanding this attachment transition process can aid in understanding the challenges that the students face and ultimately aid in learning the student’s reasons to live.

Gender is important in considering a student’s reasons to live. Women appear to report more overall reasons to live and differ from their male counterparts in what is personally more important to them. Although there is a difference in reasons to live for males and females, the difference is small. This may suggest that there is are other factors that help to explain the relationship between gender and reasons to live.

For college students, a relatively strong relationship between attachment avoidance and reason to live was found. The findings of the study are supportive of attachment theory, as well as attachment theory and reasons to live. In addition, there is tentative support for the idea that college students are transitioning from dependence on and attachment to parents to emotional autonomy from parents and attachment to peers; however it is not conclusive from the analysis that was conducted.

**Implications for Practice**

Prior research has suggested that people who have an insecure attachment pattern (i.e., a combination of high anxiety and high avoidance) view themselves more negatively than those who are less anxious and avoidant in relationships. These same individuals have been shown to have higher rates of suicide ideation and attempts (Adam et al., 1996; Allen et al., 2001; Diamond et al., 1999; Gormley, 2004; Lessard & Moretti, 1998; Wright et al., 2005). The
findings of this study support a relationship between attachment anxiety and avoidance and reasons to live. Therefore attachment patterns within college students may be an important aspect of their development and thus, should be a focus of practitioners.

The results of the current study have numerous implications for counseling practice. The findings that both attachment anxiety and attachment avoidance within a close friendship inversely influences reasons to live suggest that practitioners should place adequate attention on a students’ support network, including friends. Examining parental influence and parent’s role in the student’s life is also critically important. Practitioners should be aware of the students’ relationship with his or her parents to determine the level of emotional autonomy that has been achieved. Considering that crises can vary in severity based on personal differences, a student may turn to different individuals to fulfill a certain need. Knowing details about a student’s significant relationships and perceptions of the relationships will allow a clinician to focus on whom the student turns to in times of extreme need.

Attachment anxiety and avoidance are indicators of whom a person turns to during a time of need, but also can aid the practitioner in understanding the student’s sense of self. Utilizing attachment concepts helps a practitioner understand how a student views self as well as self in relation to others, which can also be related to assessing reasons to live. Consideration of the student’s thoughts about his or herself in a friendship or any other type of relationship can serve as a key to understanding how the student views him or herself in the world. Practitioners might integrate these points into treatment with any client. Understanding attachment anxiety and avoidance is important to treatment in general, but critical to understanding that a person with higher anxiety and avoidance within friendships may report fewer reasons to live. Practitioners
should pay attention to a student’s perception of responsiveness with friends and comfort in being close to others.

Reasons to live vary for each individual in treatment, although some patterns emerged in this study. The authors of the College Student Reasons for Living Inventory (CSRLI, Westefeld et al., 1992) provide categories for discussion via the subscales. Each sub-theme provides practitioners with discussion points during treatment, and can also indicate what clients’ view as more important reasons to live. Knowing these categories can aid in forging an alliance with a student as well as instilling hope in a student who may be considering suicide. Using reasons to live as a measure of suicidal ideation and risk may be more comfortable for practitioners who find working with suicidal clients difficult. Having a measure that is more positively worded and is less threatening for both client and practitioner may lead to more open discussions surrounding reasons to live and in effect, reduce suicide.

The relationship between gender and suicide risk has been well established within the field of suicidology (CDC, 2008). This study viewed reasons to live as an indication of risk for suicide, and sought to understand gender differences in types of reasons to live. Women endorsed responsibility to family and friends and a fear of suicide as significantly more important as a reason to live than did men. Practitioners can use this knowledge during assessment and treatment with women, but might also focus on understanding reasoning for this difference when working with males.

Practitioners should also consider the significant findings that African-American students in this study endorsed Moral Obligations and College and Future-Related Concerns as more important reasons to live than those from different ethnic backgrounds. Focusing on understanding the student’s personal history regarding religious or spiritual beliefs as well as the
students’ perception of the college experience can aid in a clinicians’ understanding of the client in general but also help foster reasons to live. Understanding a person’s reasons to live may serve as therapeutically meaningful.

**Research Implications and Future Directions**

A review of literature concerning college student’s risk of suicide indicated that more qualitative and quantitative research is needed to understand the reasons why people choose suicide. The present study begins to understand attachment patterns within college students’ friendships and reasons to live. In future studies, researchers should attempt to replicate and expand upon the findings of the study. Previous research on suicide has typically used measures that assess suicide risk; future studies are needed that focus on factors that contribute to reasons to live.

In addition, future studies should include examining the relationship between age, attachment anxiety and avoidance, and reasons to live. The findings of this study suggest that the age of the student may influence Experiences in Close Relationships-Revised because of the limited number of older students who are more likely to have achieved some level of emotional autonomy from their parents. The sample obtained for use in this study included a large number of 18- and 19-year-olds that may not yet be forming significant attachment relationships with their peers. Participants in this study were fairly homogenous in terms of ethnicity, age, gender, and place of residence (i.e., on-campus living). Future studies should examine a more demographically and ethnically diverse sample including students who have other living arrangements. Other relationships such as romantic relationships and parental relationships should also be considered in future studies. This study examined friendships as attachment relationships. The ECR-R may also be used to measure romantic relationships, parental
relationships, as well as specific relationships (i.e., a best friend versus friends in general) in regards to the influence on reasons to live.

As the reliability correlations of the Emotional Autonomy factors are low, future investigation and development of the scale is warranted. Further refinement of this scale also should include further factor analyses and the relevance for older adolescents and young adults. Also, future studies of emotional autonomy should consider using a refined version of the EA scale or using a measure with stronger psychometric properties.

Research should also include further examination of the developmental transition between emotional autonomy from a parent and young adult attachment patterns including viewing peers as attachment figures. Prior studies have addressed the process of transitioning from viewing a parent to a peer as an attachment figure, but have not included any consideration of college student developmental stages (Fraley & Davis, 1997). Focusing on integration of attachment and college student development could further theory and the practice of working with college students’ reasons to live.

**Summary**

This chapter provided a discussion of the results, the study limitations, implications for theory and practice, and recommendations for future research. Overall, findings of this study indicated a significant association between attachment anxiety and avoidance and reasons to live. The findings further suggested that attachment avoidance, gender, and dependence on parents predict reasons to live. In addition, gender and ethnicity were related to the importance of some specific themes of reasons to live. The findings of this study expanded literature on factors related college students’ reasons to live. Future studies should continue to focus on factors that contribute to reasons to live in an effort to inform theory and counseling interventions.
Understanding college students’ reasons to live provides a framework for fostering strong relationships and hope in young adults.
APPENDIX A
INFORMED CONSENT

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

**Purpose of the research study:** The purpose of this study is to identify experiences in close friendships as protective factors within college students contributing to a person’s reason to live.

**What you will be asked to do in the study:** You will be directed to a website where you will be asked to complete one online survey made up of four sections. One will ask you questions regarding your relationship with your close friends, the second will ask you questions regarding your reasons to live, and the third will ask questions regarding your relationship to your parents. You will also be asked a series of demographic questions.

**Time required:** 15 to 20 minutes

**Risks and Benefits:** You may experience some unpleasant thoughts or memories that may be produced by the types of questions asked in the surveys. The benefit is to learn of possible protective factors contributing to college student’s reasons to live. If any unpleasant thoughts or memories arise, you have the right to stop taking the survey. If you experience any distress regarding the subject matter of the questions, there are resources available for you to turn to at any point. On the University of Florida campus, please contact either the Counseling Center at 352-392-1575 or Student Mental Health at 352-392-1161. If you experience distress after 5 pm, you may contact the Alachua County Crisis Center at 352-264-6789 (24 hours a day/7 days a week) or you may call the hotline provided by the American Association of Suicidology at 1-888-273-TALK (8255).

**Compensation:** There is no compensation offered for participation in this study.

**Confidentiality:** Your identity will be kept confidential to the extent provided by law. Your information will be sent to a database online and downloaded at the completion of the study. Your name or email address will not be connected to your information at all.

**Voluntary participation:** Your participation in this study is completely voluntary. There is no penalty for not participating.

**Right to withdraw from the study:** You have the right to withdraw from or discontinue the study at anytime without consequence.

**Whom to contact if you have questions about the study:**
Keely Hope, Ed.S., LMHC, NCC Doctoral Candidate, Department of Counselor Education, 1215 Norman Hall, University of Florida, Gainesville, FL 32611, kjhope@ufl.edu 352-281-8446 or Sondra Smith-Adcock, Ph.D., Department of Counselor Education, 1215 Norman Hall, University of Florida, Gainesville, FL 32611 ssmith@coe.ufl.edu 352-392-0731
Whom to contact about your rights as a research participant in the study: UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250; ph 392-0433.

Agreement: I have read the procedure described above. I voluntarily agree to participate in the procedure. Click here to agree and continue.
APPENDIX B

THE EXPERIENCES IN CLOSE-RELATIONSHIPS – REVISED (ECR-R)
QUESTIONNAIRE (FRALEY, WALLER, AND BRENNAN, 2000)

The statements below concern how you feel in close friendships. We are interested in how you generally experience relationships with friends, not just in what is happening in a current relationship. Respond to each statement by clicking the circle next to the appropriate circle to indicate how much you agree or disagree with the statement.

1. I'm afraid that I will lose my friend’s love.
2. I often worry that my friend will not want to stay with me.
3. I often worry that my friend doesn't really love me.
4. I worry that friends won’t care about me as much as I care about them.
5. I often wish that my friend's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my friendships.
7. When my friend is out of sight, I worry that he or she might become interested in being someone else’s friend.

8. When I show my feelings for friends, I’m afraid they will not feel the same about me.
9. I rarely worry about my friend leaving me.
10. My friend makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my friend(s) don't want to get as close as I would like.
13. Sometimes friends change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a friend gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my friend.
17. I worry that I won't measure up to other people.
18. My friend only seems to notice me when I’m angry.
19. I prefer not to show a friend how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my friend.
21. I find it difficult to allow myself to depend on friends.
22. I am very comfortable being close to friends.
23. I don't feel comfortable opening up to friends.
24. I prefer not to be too close to friends.
25. I get uncomfortable when a friend wants to be very close.
26. I find it relatively easy to get close to my friend(s).
27. It's not difficult for me to get close to my friend(s).
28. I usually discuss my problems and concerns with my friend.
29. It helps to turn to my friend(s) in times of need.
30. I tell my friend(s) just about everything.
31. I talk things over with my friend.
32. I am nervous when friends get too close to me.
33. I feel comfortable depending on friends.
34. I find it easy to depend on friends.
35. It's easy for me to be affectionate with my friends.
36. My friend(s) really understands me and my needs.
APPENDIX C
EMOTIONAL AUTONOMY SCALE (STEINBERG & SILVERBERG, 1986)

Please read each statement and rate each one on the following 4-point Likert Scale where 1 = Strongly Disagree and 4 = Strongly Agree.

1. My parents and I agree on everything.
2. I go to my parents for help before trying to solve a problem myself.
3. Even when my parents and I disagree, my parents are always right.
4. It's better for kids to go to their best friend than to their parents for advice on some things.
5. When I've done something wrong, I depend on my parents to straighten things out for me.
6. There are some things about me that my parents don't know.
7. My parents know everything there is to know about me.
8. I try to have the same opinions as my parents.
9. If I were having a problem with one of my friends, I would discuss it with my mother or father before deciding what to do about it.
10. When I become a parent, I'm going to treat my children in exactly the same way that my parents have treated me.

11. There are things that I will do differently from my mother and father when I become a parent.

12. My parents hardly ever make mistakes.
APPENDIX D
COLLEGE STUDENTS REASONS FOR LIVING INVENTORY (WESTEFELD, CARDIN, & DEATON, 1992)

Please rate each statement’s importance as a reason for not killing yourself at this time in your life on the following Likert Scale:

1 – not at all important 2 – quite unimportant 3 – somewhat unimportant

4 – somewhat important 5 - quite important 6 – extremely important

1. I am happy.
2. I enjoy life.
3. I have a lot of positive things going for me.
4. I have confidence in my ability to deal with problems.
5. I believe I can cope with my problems.
6. I believe I have control over my life.
7. I am too stable to kill myself.
8. I am looking forward to the future.
9. I just don’t think that things would ever get bad enough to kill myself.
10. I love and respect myself.
11. I want to put my college degree to good use.
12. I have my career to look forward to.
13. I want to graduate from college.
14. College will enhance my future.
15. I want to succeed.
16. I’ve worked to hard to throw it all away now.
17. I want to live to see what potential I have.
18. I want to contribute to society.
19. I want to see how people and the world will change in the future.
20. I want to have children.
21. It is against my religious beliefs to commit suicide.
22. I believe that only God has the right to end life.
23. I consider it morally wrong.
24. Killing myself would be murder.
25. I am here for a purpose.
26. I wouldn’t kill myself because of the values my parents taught me.
27. I would not want to disappoint my family.
28. It would cause a lot of guilt and pain for my family.
29. It would cause a lot of guilt and pain for my friends.
30. I would miss my family.
31. I have a responsibility and commitment to my family.
32. My family might believe I didn’t love them.
33. Others depend on me (family, children) and need me.
34. I would miss my friends.
35. I’d be afraid of trying it and failing.
36. I’m scared of the pain that I would experience.
37. I’m a coward and would not have the guts to do it.
38. I could not decide where, when, or how to do it.
39. I’d be afraid that if I failed I’d be left with a serious injury.
40. I would be hassled by my family/friends if I failed.
41. I am too young to die.
42. I would be afraid of what others might think.
43. I want people to have good/positive memories of me after I die.
44. I would embarrass my college/university.
45. Killing myself would show a lack of character.
46. Killing myself would show that I’m a failure and cannot cope with everyday life.
APPENDIX E
DEMOGRAPHIC QUESTIONNAIRE

Please identify your gender by selecting the box next to it:

- Male
- Female

What is your age?

- 18
- 19
- 20
- 21
- 22
- 23
- 24

Please select the box next to the racial group with which you most strongly identify:

- Black, African-American, or Caribbean-American
- White, Caucasian, or European-American
- Hispanic or Latina/Latino
- Asian-American or Pan-Asian American
- Native-American
- Arab-American
- Other (provide a blank)

Please select the box next to your current year in college:

- First
- Second
- Third
- Fourth
- Fifth year or more

Where is your current place of residence?

- On campus
- Off Campus
- At home
- Other
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Keely Jennifer Hope was born in London, England to an American mother and a British father. She has one younger brother who was also born in London. At age six, after her parents separated, she moved to Illinois, to live with her grandmother. When she was eight, the family moved again to Louisiana, where she would remain until she turned 21. During that time, her parent’s divorced and her mother remarried. Keely attended Louisiana State University and majored in psychology. After graduating, she attended Mississippi State University, where she received her master’s degree in counselor education. Keely moved to Gainesville in 2003 to complete her master’s internship. She graduated in December 2003 and began working toward her Specialist in Education degree at the University of Florida in August 2004. Keely enrolled in the doctoral program in August 2005. She received her Ph.D. from the University of Florida in Spring 2009.

Keely began working as a screener at Meridian Behavioral HealthCare as an intern in her master’s program. She continued to work there for four and a half years. It is as a screener at the Crisis Stabilization Unit that she discovered her passion of crisis intervention. She has also provided comprehensive evaluations to the Department of Juvenile Justice, crisis intervention for the Department of Housing and Residence Education, counseling at the Levin College of Law, and taught undergraduate students at the University of Florida.

Keely’s current interests include traveling as much as possible, music of all types, and cooking for her friends; although she has not had a chance to do these things much during her tenure as a doctoral student, she looks forward to the opportunities of doing more of these activities.