ABSTRACT

MCPHERSON, ANDREA V. College Student Life and Financial Stress: An Examination of the Relation Among Perception of Control and Coping Styles on Mental Health Functioning. (Under the direction of Mary E. Haskett, Ph.D.)

Past research indicates that mental health problems of university students are on the increase. The transition to college is easy for some students, but for many others the shift can be very stressful. The college years are also a time during which most students get their first opportunity to manage money. Financial stress has been defined as the unpleasant feeling that one is unable to meet financial demands, cannot afford the necessities of life, and has insufficient funds to make ends meet (Davis & Mantler, 2004). Given the potential stress one may experience while transitioning to college in addition to the high amount of life and financial stress experienced in college, university and college students may be at increased risk for psychological problems compared to same-aged peers (Bouteyre, Maurel, & Bernaud, 2007; Dwyer & Cummings, 2001; Smyth, Hockemeyer, Heron, Wonderlich, & Pennebaker, 2008).

One way to prevent poor psychological adjustment resulting from general life stress as well as financial stress would be to help college students develop skills necessary to cope with the impact of each stressor. Studies have suggested that individuals use different coping styles depending on the stressor faced. In general, studies have indicated that coping efforts intended to alter the source of stress by acting on it directly (problem-focused coping) tend to be used more often with events appraised as controllable, while palliative coping strategies to modulate emotional reactions (emotion-focused coping) are used more often with events perceived as beyond personal control.
The present study was designed to investigate the differential effects of coping style and perception of control on managing life stress and financial stress in a sample of undergraduate college students. Using regression analyses, the current study provides support that college students experience life and financial stress, and that those who indicated feeling stressed were also experiencing symptoms of depression and anxiety. Results from the present study also indicate differential patterns of relations among coping, perceived control, and mental health functioning for life stress and financial stress. Specifically, students who used a high amount of emotion-focused coping strategies for dealing with financial stress experienced more depressive symptoms than those who used lower amounts of emotion-focused coping. Further, under conditions of life stress perceived control necessitated the use of either type of coping whereas under conditions of financial stress, appraisals of control only warranted the use of problem-focused coping. Finally, an association was found between students’ perceived control and reported depressive and anxiety symptoms under conditions of financial stress; however, contrary to prediction, no significant relations were indicated between these variables under conditions of life stress. Taken together, these findings suggest that life and financial stress may be qualitatively different from one another. Of note, this study was the first to investigate the effectiveness of various coping styles for college students experiencing financial stress.
College Student Life and Financial Stress: An Examination of the Relation Among Perception of Control and Coping Styles on Mental Health Functioning

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WE DID IT!
# TABLE OF CONTENTS

LIST OF TABLES .................................................................................................................. x

LIST OF FIGURES .............................................................................................................. xi

CHAPTER ONE ...................................................................................................................... 1

Introduction ......................................................................................................................... 1

Current study ....................................................................................................................... 3

CHAPTER TWO ..................................................................................................................... 5

Literature Review ............................................................................................................... 5

The term “stress” ................................................................................................................ 5

Sources of stress ................................................................................................................ 6

Life stress among college students .................................................................................. 7

  Academic stressors of college students ........................................................................ 8

  Personal stressors of college students .......................................................................... 9

Financial stress among college students ......................................................................... 13

  Common sources of financial stress among college students .................................. 13

    “Other debt” among college students ..................................................................... 13

    Credit card debt in college students ...................................................................... 15

    The stress of credit card debt ................................................................................. 16

Consequences of stress ..................................................................................................... 17

  Three ways stress can lead to illness ........................................................................ 17
Outcomes of life stress for college students ............................................................... 17
Outcomes of financial stress for college students .................................................... 19
A Review on Coping ........................................................................................................ 21
Individual differences in coping ..................................................................................... 22
Theoretical approaches to studying coping ................................................................. 23
Coping styles: problem- and emotion-focused ............................................................ 24
Coping in college ............................................................................................................ 26
  Coping in college with life stress ................................................................................ 26
  Coping in college with financial stress ....................................................................... 29
An introduction to perception of control/goodness of fit ............................................. 30
Coping with financial stress according to the adolescent perspective ....................... 32

CHAPTER THREE ............................................................................................................. 37
Statement of the Problem .............................................................................................. 37
Hypotheses ..................................................................................................................... 38
  Objective 1: To determine if life and financial stress predict mental health functioning .................................................................................................................. 38
  Objective 2: To determine if coping style moderates the relation between life and financial stress and mental health functioning ................................................................. 39
  Objective 3: To investigate if coping strategies are related to perception of control ................................................................................................................................. 41
  Objective 4: To determine if perception of control is related to mental health
Objective 5: To determine if perception of control and coping strategies interact to predict mental health outcomes 43

CHAPTER FOUR 45

Method 45
Participants 45
Procedures 45
Instrumentation 47
Measures of stress 47
Life Stress 47
Financial stress 48
Perception of control 50
Coping 51
Mental health functioning 59

CHAPTER FIVE 61

Results 61
Overview of data analytic strategy 61
Preliminary Analyses 61
Objective 1. To determine if stress predicts mental health functioning 63
Objective 2. To determine if coping style moderates the relation between life and
Objective 3. To investigate if coping strategies are related to perception of Control ................................................................. 67

Objective 4. To determine if perception of control of life and financial stressors is related to mental health functioning .................................................. 68

Objective 5. To determine if perception of control and coping strategies interact to predict mental health outcomes .......................................................... 68

CHAPTER SIX ........................................................................................................................................................................... 71

Discussion .................................................................................................................................................................................. 71

Objective 1: To determine if stress predicts mental health functioning....... 73

Objective 2: To determine if coping style moderates the relation between life and financial stress and mental health functioning........................................ 74

Objective 3. To investigate if coping strategies are related to perception of control .............................................................................................................. 77

Objective 4. To determine if perception of control of life and financial stressors is related to mental health functioning Objective 5. To determine if perception of control and coping strategies interact to predict mental health outcomes... 79

Objective 5. To determine if perception of control and coping strategies interact to predict mental health outcomes .................................................................... 80

Summary .................................................................................................................................................................................. 82

Limitations of Study .................................................................................................................................................................. 84
Future Directions ............................................................................................................. 86

REFERENCES .................................................................................................................. 89

APPENDICES .................................................................................................................. 111

Appendix A Instructor script .......................................................................................... 112

Appendix B College Life Stress Inventory ..................................................................... 113
LIST OF TABLES

Table 1. Final Factor and Item Loadings for Ways of Coping Questionnaire; Life Stress ................................................................. 54
Table 2. Final Factor and Item Loadings for Ways of Coping Questionnaire; Financial Stress ................................................................. 56
Table 3. Final Loadings for Problem- and Emotion-focused Coping Styles; Separate Analyses for Life Stress and Financial Stress ....................... 59
Table 4. Descriptive Information of Measures .................................................. 62
Table 5. Hierarchical Regression Analyses Testing the Association between Life Stress and Mental Health Functioning and the Moderating Influence of Coping Style ................................................................. 65
Table 6. Hierarchical Regression Analyses Testing the Association between Financial Stress and Mental Health Functioning and the Moderating Influence of Coping Style ................................................................. 66
Table 7. Hierarchical Regression Analyses Testing the Interaction between Perception of Control and Coping in the Prediction of Mental Health Under Conditions of Life Stress ................................................................. 69
Table 8. Hierarchical Regression Analyses Testing the Interaction between Perception of Control and Coping in the Prediction of Mental Health Under Conditions of Financial Stress ................................................................. 70
LIST OF FIGURES

Figure 1. Emotion-focused coping moderates the association between financial stress and depressive symptoms ......................................................... 67

Figure 2. Model of supported and unsupported relations between college students’ life stress, perception of control, coping strategies, and mental health outcomes ........................................................................................................ 72

Figure 3. Model of supported and unsupported relations between college students’ financial stress, perception of control, coping strategies, and mental health outcomes ........................................................................................................ 73
CHAPTER ONE

Introduction

In the past 25 years, college counseling centers have been reporting that students are more distressed than in the years past (Benton, Robertson, Tseng, Newton, & Benton, 2003; Kadison, 2006; Pledge, Lapan, Heppner, Kivlighan, & Roehlke, 1998; Schwartz, 2006). Based on National College Health Assessment (NCHA) surveys, the American College Health Association (ACHA) reported stress was the number one impediment to academic performance, outranking other impediments to learning such as being sick and having sleep and relationship difficulties (ACHA, 2003).

The transition from high school to university is a major life change for many adolescents (Friedlander, Reid, Shupak, & Cribbie, 2007). First-year college students are challenged to transition into an environment with more personal freedom, a rigorous academic life, and perhaps a more independent lifestyle. Most college freshmen that have moved away from home will experience a separation (physically and emotionally) from their parents, likely reducing their contact and support from family and friends. Given these factors, college can be considered a time of considerable life stress (Dusselier, Dunn, Wang, Shelley, & Whalen, 2005; Jackson & Finney, 2002; Kadison & DiGeronimo, 2004).

The college years are also a time in which most students get their first opportunity to manage money. In particular, college freshmen are faced with the responsibility of budgeting and paying their own bills. During the first few weeks of college, a student spends money on textbooks, tuition, dorm room supplies, transportation (e.g., gas, bus fare), and meal plans. Students may quickly realize that the money they have is not enough to get what they want or
even what they need. For some, this may be a feeling they have experienced in the past – for others, this may be the first time they have ever felt financial stress. Financial stress has been defined as the unpleasant feeling that one is unable to meet financial demands, can not afford the necessities of life, and has insufficient funds to make ends meet (Davis & Mantler, 2004).

Stress from finances is a common complaint of college students (Kadison & DiGeronimo, 2004; Vye, Scholljegerdes, & Welch, 2007).

Given the high amount of stress experienced in college, university and college students may be at risk for psychological problems (Bouteyre, Maurel, & Bernaud, 2007; Dwyer & Cummings, 2001; Smyth, Hockemeyer, Heron, Wonderlich, & Pennebaker, 2008). Indeed, a growing body of evidence suggests that mental health problems are numerous and increasing among students in institutions of higher education (Eisenberg, Gollust, Golberstein, & Hefner, 2007; Stone & Archer, 1990). According to the 2011 National College Health Assessment (ACHA, 2011), completed by 105,781 students at 129 colleges and universities, almost 30% of men and 36% of women reached a level of depression that made daily activities difficult at least once during the year. In addition, 43% of men and almost 60% of women reported experiencing “overwhelming” levels of anxiety within the last 12 months. Several studies of college students’ mental health needs have shown that depression and anxiety, in particular, are commonly reported concerns at student health centers (Bertocci, Hirsch, Sommer, & Williams, 1992; Yorgason, Linville, & Zitzman, 2008).

One way to prevent poor psychological adjustment from general life stress as well as financial stress would be to help college students develop skills necessary to cope with the
impact of each stressor. Studies have suggested that individuals use different coping styles depending on the stressor faced. More specifically, there is preliminary evidence to suggest that individuals use an active approach in dealing with general life stress and a less active approach to address financial stress. However, benefit gained from using a particular coping strategy will depend upon the individual and the demands of the situation. “Use of coping strategies is not considered to be mutually exclusive and, in fact, may be mutually facilitating” (Snyder & Dinoff, 1999, p. 10). Nevertheless, researchers have concluded that specific coping strategies produce superior outcomes when used by the appropriate person undergoing a particular stressor in the right context (Snyder & Dinoff, 1999).

**Current study**

This study adds to the existing literature related to coping with life stress in college and expands on the relatively small research base pertaining to coping with financial stress in the college student population. In addition, this study investigated the differential effects of coping style on managing life stress and financial stress. Considering young adults are entering college at increasing rates, there are important practical implications for better understanding the role of stress in college students’ lives (Darling, McWey, Howard, & Olmstead, 2007). This study adds to the understanding of how various coping styles impact the psychological adjustment of college students and will provide insight for counselors and psychologists working with these students.

To provide a foundation for the study hypotheses, a review of the sources and types of stress and variables identified as outcomes of stress are provided. Next, a review of the literature related to coping is provided. This review consists of findings from past research,
highlighting the studies that have documented the differential effects of coping style on life
vs. financial stress.
CHAPTER TWO

Literature Review

The term “stress”

The term “stress” has been in existence since the 14th century (Merriam Webster’s Dictionary) and some believe the word “stress” may have been derived from the Latin stringere (to draw tight). In most dictionaries, stress is both a verb and a noun. As a noun, “stress” can refer to external events or to an internal state. Similarly, the verb “stress” can be active, as in “to stress,” or passive, as in “to be stressed.” Furthermore, stress is sometimes used to refer to the physiological response brought on by an external event (a “stressor”), an internal stressful state (“strain”), or the stimulus that produces the response pattern (a source of stress).

The term “stress” has been used to describe a variety of negative feelings and reactions that accompany threatening or challenging situations. However, not all stress reactions are negative. Hans Selye suggested that stress had four basic variations: good stress (eustress), bad stress (distress), overstress (hyperstress), and understress (hypostress). In addition, Selye (1979) stated that the essential purpose of behavior was to arrive at a balance between the negative influences of stress while finding as much eustress as possible.

Historically, the term stress has been used in research in a somewhat ambiguous fashion, and leading researchers in the field are in disagreement as to its precise meaning. Some investigators have proposed to abandon the term “stress” altogether because the term is too vague (Mason, 1975; Pollock, 1988). Though the concept of stress has an uncertain quality to it, stress researchers have contributed much to our understanding about sources of
stress and the role that stress plays in the cause of disease and psychological discomfort (Monat, Lazarus, & Reevy, 2007).

**Sources of stress**

Incidents such as parental divorce, illness in the family, moving, and death of a family member can lead to stress and even precede severe consequences (e.g., depression). Incidences such as these are termed stressors. Stressors can take a variety of forms, including discrete life events, minor “hassles”, and chronic strain (Pearlin, 1989). A discrete life event is a stressor that is classified by a specific event such as the death of a family member or sexual assault. A stressor that is considered to be a minor hassle is one that is an irritating and frustrating demand that occurs during everyday transactions with the environment (Holm & Holroyd, 1992). For college students, an example of a minor hassle would be getting sick or writing a paper. Some researchers have examined the cumulative impact of daily hassles. Rowlinson and Felner (1988) assessed the ability of adolescents to adapt to daily hassles and major events and concluded that each source of stress acted independently. They also showed that daily hassles had a greater effect than life events on the way young people adapted to the expectations of family and school. In addition, Burks and colleagues (1985) reported that daily hassles of college students were a greater risk factor than life events for the development of psychological symptoms including depression, anxiety, insomnia, and obsessive-compulsive disorders.

The final form of stressor as described by Pearlin (1989) is that of chronic negative experiences such as unemployment. Pearlin states that chronic strain involves relatively enduring problems, conflicts, and threats that many people face in their daily lives. Towbes
and Cohen (1996) believe there are two forms of a chronic stressor. The first form is similar to Pearlin’s idea of chronic experiences in which there is an ongoing difficulty that stems from a discrete event. The second type of a chronic stressor consists of an ongoing stressful process that has little or no grounding in a discrete event. The current study captures both forms of a chronic stressor in its measurement of financial stress because college students’ responses may reflect a current financial situation that is due to a sudden loss of income (discrete life event) as well as a general lack of responsible financial habits (no grounding in a discrete life event).

In the present study, life stress and financial stress of college students were examined separately because it is believed that they are different in nature and might require different coping styles for the resolution of stress (Kariv & Heiman, 2005). In this study, life stress was conceptualized as a product of several minor daily hassles whereas financial stress may be the result of more chronic experiences. The two types of stress - life and financial - are discussed in separate sections followed by a presentation of overall outcomes of stress for college students.

**Life stress among college students**

Although attending college is generally viewed as a positive experience, it nonetheless sometimes involves a stressful period of adaptation for students (Bouteyre et al., 2007). College students face a variety of challenges as they transition from high school to higher education. This transition signifies a crossroads between adolescence and adulthood, a period of passage between the old and the new, and between relationships of the past and relationships of the present (Tinto, 1988). The transition from high school to college involves
significant academic, interpersonal, and intrapersonal changes (Shaver, Furman, & Buhrmester, 1985). Although several studies focus exclusively on first-year students as they transition into the university setting, it is expected that college students are involved in a continuing process of exploration and adjustment with respect to their college environment throughout the entire college experience (Falk, 1975).

Researchers have attempted to identify stressors on college campuses that could potentially cause or worsen student problems. Archer and Lamnin (1985) studied personal and academic stressors reported by students on a college campus. They derived 13 academic and 15 personal stressor categories from an open-ended questionnaire format. According to Archer and Lamnin, the major academic stressors as reported by college students were tests, grade competition, time demands, problematic professors and classroom environment, and concerns about career and future success. Among the major personal stressors identified were difficult intimate relationships, parental conflicts, and interpersonal conflicts with friends.

The following sections elaborate on the stressors currently experienced by college students and use similar categories of academic and personal stressors used by Archer and Lamnin (1985). The discussion of personal stressors is comprised of commonly reported stressors by college students, including both intra- (e.g., sleeping habits) and interpersonal stressors (e.g., roommate problems).

**Academic stressors of college students.** Academic stressors include the student’s perception of the extensive knowledge base required and the perception of an inadequate time to develop it (Misra & McKean, 2000). Several studies have reported that students experience academic stress at predictable times each semester with the greatest sources of
stress resulting from taking and studying for exams, competing with classmates for grades, and trying to master a large amount of content in a small amount of time (Archer & Lamnin, 1985; Kohn & Frazer, 1986). There are several reasons students feel stressed due to academics, one being the important outcomes riding on a successful performance in school. Examples of such outcomes are staying in school, retaining financial aid, achieving graduation, distinguishing oneself from peers, landing that first job, or continuing education in graduate school (Vye et al., 2007).

Murphy and Archer (1996) attempted to address the changes in stressors of university students over time by replicating a 1985 study conducted by Archer and Lamnin. They believed that academic stressors for a college student could change over time particularly when societal changes were occurring simultaneously. For example, a deteriorating job market could create even more stress for college students because they would worry about their future careers. Indeed, Murphy and Archer found that a decrease in funding for public higher education and the push for everyone to do “more with less” was likely to increase academic stress considerably. This is of particular relevance to the present study given the current state of economic crisis in America. Compared with previous years, the amount of stress being experienced by college students in today’s society may be greater than was experienced in the past because of the economic climate. Elevated stress levels may require counselors and student affairs professionals to provide even more comprehensive services to students dealing with academic stress.

**Personal stressors of college students.** Several studies, pertaining only to first-year college students, have found student adjustment to be influenced more by nonacademic
variables than by those variables related to academics (Brooks & Dubois, 1995; Johnson, 1997; Rickinson & Rutherford, 1995). Research on student health indicates that many college students must overcome challenges not only in the classroom but also in dealing with issues pertaining to family, peers, autonomy, and sexuality (Damush, Hays, & DiMatteo, 1997). College students continue to face a variety of challenges related to both intrapersonal and interpersonal stressors throughout their college career and these challenges can become sources of stress (Disch, Harlow, Campbell, & Dougan, 2000). For example, during the transition to college, students commonly questioned their relationships, direction in life, and self-worth (Chickering, 1969); tremendous inner turmoil may result from these types of questions about identity and lead to personal crisis (Henton, Lamke, Murphy, & Haynes, 1980). An identification and further examination of these personal stressors could provide information to allow campus counselors and administrators to work toward a less stressful campus environment. The following paragraphs will provide a discussion of the common types of personal stressors reported on college campuses.

Ross and colleagues (1999) sought to determine the major sources of stress among college students. One hundred undergraduate students were administered a stress survey. Stressors were identified as either daily hassles or major life events. In this sample, intrapersonal sources of stress were the most common source of stress. In fact, intrapersonal sources of stress were three of the top five sources of stress listed by participants. The top three most frequent stressors were change in sleeping habits (89%), vacations/breaks (82%), and change in eating habits (74%).
Given the nature of the college environment, with its limited access to adults, there is
an almost natural generational distance built in, encouraging a stronger reliance of peers on
each other. Tinto (1993) and others (Gerdes & Mallinckrodt, 1994) argue that a college
student must find some compatible academic and/or social group with whom to establish
membership in order to remain in school. Swenson and colleagues (2008) examined the link
between the closeness of peer relationships and adjustment outcomes. First-year college
students ($n = 271$) from two institutions were surveyed about friendship quality, peer
attachment, quality of attachment with friends, and adjustment to the college setting. Based
on findings, investigators concluded that although it was helpful to keep in touch with a high
school friend, a close relationship with a new college friend was more important for
adjustment. It seems that it is not only beneficial for college students to have friends in
general (Buote et al., 2007), but even better to have friends that are also experiencing the
college environment.

Numerous studies document the benefits of positive peer relationships for college
students (Buote et al., 2007; Friedlander et al., 2007; Mounts, Valentiner, Anderson, &
Boswell, 2006); however college social life also carries the potential for negative
experiences. Edwards and colleagues (2001) examined the unique contribution of negative
social exchange in the relation between stress and health symptoms. Negative social
exchanges include events such as losing one’s temper with a friend. Participants were 206
undergraduate students enrolled in a psychology class. Participants completed questionnaires
that measured stress, social support, negative social exchange, and physical health.
Regression analyses revealed that negative social exchange accounted for more variance in
physical health symptoms than did stress or social support. Investigators concluded that negative social exchange was a significant predictor of physical symptoms and that it was not the presence of positive social interactions, but the absence of negative social interactions, that was associated with better physical health.

In addition to influencing physical health, characteristics of college social life, such as living with a roommate, also carries the potential for emotional distress (Vye et al., 2007). Among the various types of complaints heard by college counseling services, one of the most common is that of roommate problems (Kadison & DiGeronimo, 2004). For college students who live away from home, adjusting to living with roommates can be a challenge. Living in small spaces in crowded conditions can actually erode the positive buffer of social support, making social contact ineffective in protecting students from stress (Lepore, Evans, & Schneider, 1991). Living with a roommate who is noisy or is constantly having friends over can become an environmental stressor; environmental stressors such as high noise levels combined with social activity can sometimes increase anxiety of college students (Edsell, 1976).

In summary, there are several sources of general life stress for college students. Among the most commonly cited are academic, interpersonal, and intrapersonal stressors. In the present study, life stress for college students was represented by specific events in each of these three domains, including events such as writing a term paper, dealing with a roommate, and oversleeping for an exam. The second type of stressor, financial stress, is discussed next.
Financial stress among college students

According to the U.S. Census Bureau, more than a third of Americans demonstrate little or no understanding of finances, and the average American has no savings and overspends on a monthly basis (Jennings, 2007). The lack of money management skills (e.g., budgeting) among college students represents an even greater concern (Knight & Knight, 2000) and when asked when they would have liked to have received financial management information, 59% of graduate students said as early as high school and 40% said as a college freshman (Nellie Mae, 2007). Over half of the sample agreed that receiving information about budgeting, financial aid, using credit, and saving strategies should be done on an ongoing basis throughout the undergraduate years. Still, other studies have found that students do not respond to financial education until after they are suffering from significant debt (Hayhoe, Leach, & Turner, 1999).

Literature has documented that finances are one source of stress experienced by college students (Kadison & DiGeronimo, 2004; Tinto, 1993). Common sources of financial stress for college students were divided into two categories: “other debt” and credit card debt. “Other debt” can be thought of as non-credit/charge card debt such as student loans and automobile loans (Jones, 2005). Tuition is discussed as a source of stress and is subsumed under “other debt”.

Common sources of financial stress among college students.

“Other debt” among college students. One potential source of financial stress for college students is tuition costs. Tuition and fees have increased exponentially, at roughly three times the rate of inflation (Williams, 2006). Annual U.S. tuition and fees have risen
from an average of $924 in 1976, to $4,755 in 1997, to $6,067 in 2002. This has put a
tremendous burden on undergraduates as well as their families. Williams (2006) stated that it
is no longer possible for undergraduates to “work their way through college.” Bousquet
(2008) noted that, during the 1960s, a student could have worked 15 hours a week at
minimum wage during school and 40 hours a week during the summer to pay his or her
public university education. Nowadays, one would have to work 55 hours a week all year
long to pay costs of higher education. In the United States, only 20% of undergraduates do
not work at all. About 50% of all undergraduates work an average of 25 hours per week. The
remaining 30% work full-time or more than full-time. It seems that even if a student is
working and parents have saved money for college, it is likely that the cost of attending
school will still be too high and college students will have to search for additional support.
One of the most common avenues of support for college students is the student loan, a
second source of financial stress for some college students.

The average undergraduate student loan debt in 2002 was $18,900 (Baum &
O’Malley, 2003). It more than doubled from 1992, when it was $9,200 (Williams, 2006).
Forty-two percent of former undergraduate students who participated in the 2002 National
Student Loan Survey reported that student loan debt was a major reason for not attending
graduate school (Hayhoe, Leach, Allen, & Edwards, 2005). The average graduate pays $200
per month on college loans (Waggoner, 2005). A cycle can begin in which post-graduation
students are juggling the cost of a new car, insurance, a birth of a child, and a mortgage while
trying to pay monthly student loan payments. It can become a vicious cycle if these routine
expenses begin to mount up and graduates apply for multiple credit cards. And unfortunately,
college students are likely to suffer even more than nonstudents because many college students will use their student loan payments to pay off or reduce their credit card debts (Manning, 1999).

Credit card debt in college students. Credit card debt among undergraduate college students is becoming a major problem on campuses nationwide (Adams & Moore, 2007). A study conducted by Nellie Mae in 2001 indicated that the average undergraduate student doubles credit card debt and triples the number of credit cards owned by the time of graduation (Nellie Mae, 2002). Younger cohorts are more susceptible to credit card debt because credit card companies have begun to concentrate much of their marketing to high school and college students (Ritzer, 1995). Students are routinely inundated with credit card marketing schemes that apparently have been highly effective (Adams & Moore, 2007). It is stated that credit card companies aggressively target college students because college students are expected to have higher than average earning power and are therefore seen by the credit card companies as a desirable market (Warwick & Mansfield, 2000).

Credit is a part of most college students’ lives and having access to credit allows students to more conveniently make purchases, travel, and even attend college (Jones, 2005). Sallie Mae (2009) reported that students used credit cards to pay for direct education costs by the following percentages and expense types: general school supplies, (e.g., paper, notebooks, calculator) 75%; textbooks, 76%; fees, 30%; and tuition, 30%. Students also reported using credit cards to pay for non-direct education costs: food, 84%; clothing, 70%; cosmetics/toiletries, 69%; and travel, 54%. Though these expenses may sound like a
legitimate use for the cards, such practices may lead students to a position of “bad credit” that will follow them long after they have completed their degrees (Jennings, 2007).

According to Sallie Mae (2009), 84% of undergraduates in 2008 began the school year with credit cards. Undergraduates reported freshman year as the most prevalent time for obtaining credit cards, with 56% reporting having obtained their first card at the age of 18. As students progress through school, credit card use swells. Eighty-eight percent of final year students have a credit card compared to 67% of freshmen. Sixty-two percent of final year students carry four or more cards while only 23% of freshmen carry that number of cards. Final year students carry an average balance of $4,138 (up 41% from $2,900 in 2004) while freshmen carry an average balance of $2,038. When combined with student loan debt, the average debt level for freshmen was $3,150 and $20,402 for seniors (Baum & O’Malley, 2003).

The stress of credit card debt. Credit card debt is especially stressful for several reasons (Drentea, 2000). First, credit card debt can be associated with both short-term and long-term financial difficulties such as blemished credit histories (Hoover, 2001). Long-term costs to the consumer include denial of future credit for automobile, home, and other credit purchases. Second, high credit card debt may lead individuals to spend their income on lesser-quality goods and services associated with their own health. Finally, the stress of owing money can lead to anxiety. Drentea (2000) used data from a 1997 representative sample of more than 1,000 adults and found that anxiety increased as their ratio of credit card debt to income increased. Given its relation with so many negative outcomes, credit card debt seems a potential source of financial stress.
Consequences of stress

**Three ways stress can lead to illness.** According to Holroyd and Lazarus (1982), there are three ways in which stress might lead to illness or dysfunction. First, the stress response itself can directly cause damage to the body. Consider for example, Selye’s three-stage model of stress, the General Adaptation Syndrome (GAS; Selye, 1936). Selye found that our bodies react to stress with a recognizable pattern of responses. During the *alarm* phase the body exhibits a “fight or flight” response, which prepares the body for physical activity. If the stressor persists, the second *resistance* phase begins, in which changes at many levels take place in order to reduce the effect of the stressor. For example, high levels of stress hormones, such as cortisol, will continue to help us cope with the stressor. The body can continue this stage until either the stressor is removed or the body is no longer able to sustain itself. It is in this third phase, termed *exhaustion*, that our health suffers and we could potentially damage our body. A second way in which stress might lead to illness or dysfunction is by way of maladaptive coping. Some coping responses are directly damaging to health, especially if used excessively (e.g., substance use, overwork). Finally, a third way in which stress can be harmful is reliance on coping responses that are indirectly damaging to health by causing an individual to downplay symptoms or fail to adhere to health care regimens (e.g., denial, “be tough” attitude). The following paragraphs discuss mental health outcomes of life and financial stress, highlighting the impact on the college student population.

**Outcomes of life stress for college students.** Many college students who experience stress in the transition from high school to college adjust well to the stress, but others seem to
struggle with the mounting stress (Tinto, 1988). When students perceive stress negatively or when it becomes excessive, they can experience psychological impairment (Murphy & Archer, 1996). Adlaf and colleagues (2001) provided two reasons for the elevated distress seen in college students. One, college students are in the natural age range in which rates of psychological distress and disorder are elevated relative to the general population (Schulenberg & Zarrett, 2006) and two, some studies have suggested that the transition following high school is especially problematic to adult development and trajectories.

Observations made by the staff of counseling centers and other student health care organizations indicate that mental health problems of university students are on the rise (Bishop, 2006; Eisenberg et al., 2007; Gallagher, 2005; Kadison & DiGeronimo, 2004). Over the past 20 years, the percentage of counseling center directors that report increases in mental health problems has risen from 53% in 1984 to 86% in 2004 (Gallagher, 2005). Based on findings that university students’ mental health scores were in excess of one standard deviation above the population mean for their respective age and gender groups (Roberts, Golding, Towell, & Weinreb, 1999), researchers have suggested that psychological distress among university students is significantly higher than among the general population because of the challenging transition from high school to college (Adlaf, Gliksman, Demers, & Newton-Taylor, 2001).

In particular, anxiety is a growing problem on college campuses (Vye et al., 2007). In a study of students from 15 campuses, anxiety was listed as one of students’ top six concerns (Kearney & Baron, 2002). Depression is another potential outcome of life stress among college students. According to the 2004 National College Health Assessment, almost half of
men and exactly half of women reached a level of depression during the year that made daily activities difficult. Based on a 2007 study by Bouteyre and colleagues, 41% of the 233 first-year psychology students surveyed suffered depressive symptoms. Finally, Dyson and Renk (2006) investigated adaptation to university life among 74 college students and found that levels of college stress significantly predicted their levels of depressive symptoms, with greater levels of college stress being associated with higher levels of depressive symptomatology.

**Outcomes of financial stress for college students.** There is relatively little research conducted on the consequences of financial stress among college students. In general, studies tend to focus on the relation between a specific economic hardship and outcomes. The studies presented below focus on outcomes for individuals experiencing some sort of economic hardship, mainly credit card debt and unemployment. Because of the lack of studies available on consequences of financial stress specifically for college students, some of the following discussion contains findings from research based on the general adult population.

There are numerous studies that show that financial stress increases levels of psychological maladjustment in adult men and women (Schulz et al., 2006; Viinamaki, Koskela, Niskanen, & Arnkil, 1993). Drentea (2000) used data from a 1997 representative sample of more than 1,000 adults to investigate the relation between debt and anxiety. Participants were interviewed over the phone and asked several questions pertaining to anxiety and credit card debt. Anxiety levels were reflected by how many days in the past week the participant worried or felt tense or restless. Credit card debt was measured using
five separate indicators including (a) debt/income ratio, (b) carrying an unpaid balance on credit cards, (c) amount of credit line used, (d) charging on more than two credit cards, and (e) the number of months one missed paying the minimum required payment (known as default). Drentea concluded that being in default and experiencing rising ratio of credit card debt:income were associated with levels of anxiety, such that high levels of debt were associated with high levels of anxiety.

Roberts and colleagues (1999) surveyed 360 students from two universities in London. The students provided information on demographic characteristics, financial circumstances, lifestyle, and physical and psychological well-being. Researchers found that poorer mental health was related to longer working hours outside the university and difficulty paying bills. In addition, students who had considered dropping out of school for financial reasons had lower levels of social functioning and poorer physical health. Based on these results, investigators believed there to be a link between poor mental health functioning and financial difficulty.

More specific to the present study, Eisenberg and colleagues (2007) investigated the prevalence and correlates of depression and anxiety among a large group of university students. Researchers conducted a Web-based survey of undergraduate and graduate students at a large Midwestern public university. Anxiety and depression were measured with the Patient Health Questionnaire, a nine-item instrument based on the diagnostic criteria for generalized anxiety disorder and a major depressive episode from the Diagnostic and Statistical Manual for Mental Disorders (American Psychiatric Association, 1994). Debt was measured by examining information gathered from a demographic survey and university
registrars’ databases pertaining to students’ past and current financial situations. Results revealed that students reporting current financial struggles were more likely to screen positive for diagnosis of depression and anxiety disorders. In addition, compared with students who reported growing up in a comfortable financial situation, students who reported growing up in a poor family were more likely to screen positive for depression and anxiety disorders.

To conclude, college can be a stressful time for students; for those who experience an excess of stress or perceive stress negatively, psychological maladjustment is a potential outcome. In particular, anxiety and depression are found across college campuses worldwide and are documented outcomes of both life and financial stress for some college students. Potentially, one way to prevent poor psychological adjustment from life and financial stress would be to provide college students with the skills necessary to cope with each stressor. The present study adds to the existing literature related to coping with life stress in college and expands on the relatively small research base pertaining to coping with financial stress in the college student population. In addition, this study investigated the differential effects of coping style on managing life stress and financial stress. Past research on coping strategies is discussed next.

A Review on Coping

Contemporary American culture has become nearly obsessed with stress and how to cope with it (Aldwin, 2007). Bookstores have entire sections devoted to “self-help” books—advice on the best ways to cope with personal shortcomings, romantic relationships, work, parents, children, and so forth. Newspapers and magazines contain columns that provide
advice on how to resolve problems in a variety of areas, including disputes between family members and coworkers, problems with etiquette, finances, and so on. This interest is paralleled in the research literature. A PsycINFO search in January 2012 for research on coping produced 56,073 hits, half of which were published in the last 10 years. The past 40 years have seen a rapid increase in research on coping in social and behavioral sciences, medicine, public health, and nursing (Folkman & Moskowitz, 2004). Many measures of coping have been developed and tens of thousands of studies (Somerfield & McCrae, 2000) and books on coping have been published (e.g., Aldwin, 1994).

A large proportion of contemporary research on coping can be traced back to the publication of Richard Lazarus’s 1966 book, *Psychological Stress and the Coping Process*. His book presented an approach to understanding stress and coping that went beyond the ideas of the earlier psychoanalytic perspective and an emphasis on pathology to focus on responses that ordinary people use to deal with problems of daily life. In 1980, Folkman and Lazarus defined coping as thoughts and behaviors that people use to manage the internal and external demands of situations that are appraised as stressful. This definition of coping has become widely accepted (Tennen, Affleck, Armeli, & Carney, 2000) and is used throughout research on coping.

**Individual differences in coping.** The study of coping began with the acknowledgment that there are individual differences in how one responds to stress; that is, similar stresses may have varying effects on different people (Aldwin, 2007). For example, individuals can respond in many different ways to a rebuke from a coworker. Some people simply ignore the reprimand; others argue with that coworker and try to convince him or her
that their assessment is misleading. Some people respond with threats and anger; others react with tears and apologies. Yet others accept the rebuke and are committed to remedy the situation by improving their job performance. One of the many purposes of studying coping styles is to understand why people differ in their response to stress and how these various coping styles relate to mental health functioning.

The study of coping styles is driven by the theoretical framework in which coping is conceptualized. The following section includes a brief overview of the available theoretical approaches used to conceptualize coping and a description of the framework chosen for the present study.

**Theoretical approaches to studying coping.** Aldwin (2007) presents the four approaches investigators have used to study coping. One, a person-based approach assumes that the person determines what type of coping is utilized (person → coping). Two, a situation-based approach assumes that the situation determines the coping style utilized by the person (situation → coping). Three, the interactionist approach regards coping as a function of personal and situational characteristics, assuming that the person together with the situation determines the style of coping (person + situation → coping). Thus, the person who responds with anxiety in a testing situation could be high in anxiety and reacting to an unusually difficult test. Finally, the fourth approach to investigating coping is the transactionist approach. In this instance, the person, situation, and coping mutually affect one another in a process that evolves over time. “Further, a transactionist viewpoint emphasizes that the person and the environment are not independent contributors to stress and coping but, rather, mutually affect each other for good or for ill” (Aldwin, 2007, p. 17).
For the purpose of the current research, an interactionist model was used to conceptualize the process one goes through when coping with a particular stressor. This model focuses on cognitive appraisals of the situation and the coping strategies that follow from this appraisal. Cognitive appraisal involves making initial attributions about why the event occurred; determining the extent to which the event is threatening, controllable, and predictable; and deciding what can be done (Park, 2005). These appraisals, in turn, begin the coping process when important goals of the individual have been harmed, lost, or threatened. Lazarus and Folkman (1984) initially proposed this model and believed that when individuals are faced with stressful situations they choose coping strategies that fit the degree of control they have over the specific stressor. A large body of research suggests that selecting a particular coping strategy in response to controllable and uncontrollable stressors occurs among all ages (Causey & Dubow, 1992; Compas, Macarne, & Fondacaro, 1988; Reid, Dubow, & Carey, 1995). Types of coping styles and how they are typically categorized in the literature are presented below, followed by a discussion of the relation between coping styles and mental health functioning.

**Coping styles: problem- and emotion-focused.** A major challenge in the literature on coping is wide differences in nomenclature used by scholars (Folkman & Moskowitz, 2004). In particular, researchers have used several methods for classifying types of coping strategies, including the rational method (Folkman & Lazarus, 1980; Schneider, Elhai, & Gray, 2007), empirical approaches such as factor analysis (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Steinhartd & Dolbier, 2008), and a combination of both the rational and empirical techniques (Litman, 2006).
One of the earlier nomenclatures, proposed by Folkman and Lazarus (1980), is used in the present study. Folkman and Lazarus used a rational approach to distinguish two major functions of coping styles: problem-focused coping, which involves directly addressing the problem causing distress, and emotion-focused coping, which involves attempts to regulate and improve the negative emotions associated with the problem. Examples of problem-focused coping strategies are making a plan of action and concentrating on the next step. Examples of emotion-focused coping are engaging in distracting activities, positive thinking, engaging in physical exercise or meditation, venting anger, and seeking support. In general, problem-focused coping strategies are used more often when conditions are appraised as amenable to change (Folkman & Lazarus, 1985). In contrast, emotion-focused coping strategies are more likely to be employed when there has been an appraisal that nothing can be done to modify the conditions (Folkman, 1984). The distinction between problem-focused and emotion-focused coping provides a broad framework for understanding the concept of coping.

It is important to find a common nomenclature for types of coping strategies so findings across studies can be discussed meaningfully (Folkman & Moskowitz, 2004). In the present study, coping strategies as indicated by college students were placed into problem-focused and emotion-focused categories. In the event that these two coping styles were investigated in past studies but referred to by different names, an explanation will be given. For example, some studies refer to problem-focused coping as active coping and emotion-focused coping as withdrawal coping (see Gelhaar et al., 2007). A discussion of the
effectiveness of these two coping styles when faced with life and financial stress as they relate to college students is presented next.

**Coping in college.** It is important to examine factors that influence successful adjustment to college (Brissette, Scheier, & Carver, 2002), and the ability to cope with this new experience may be an important variable. The ability to successfully cope in the college environment is a critical skill to acquire given the documented negative outcomes that stress may have on one’s mental health functioning (Hudd et al., 2000). More specifically, adaptive coping responses may reduce some stressful experiences to the level of momentary disruptions while other patterns of coping may exacerbate stress and contribute to long-term, pervasive negative outcomes.

**Coping in college with life stress.** Everyday hassles such as conflicts in school or arguments with peers are not uncommon experiences for college students (Ross et al., 1999). Despite this, research on coping has tended to focus on major adverse circumstances (e.g., major illness, the death of a close friend) that a relatively small percentage of emerging adults confront. In addition, far less research on coping has been conducted on older adolescents and college students than on younger adolescents. The following paragraphs will present studies designed to investigate coping styles similar to those in the present study and their relation with various psychological outcomes in samples of college students. These studies will illustrate the variety of research that has been conducted in the field as well as provide an understanding of effectiveness of problem- and emotion-focused coping strategies when utilized by college students.
Higgins and Endler (1995) tested the efficacy of an interactional model of stress and coping for predicting psychological distress among college students. To examine the relation of life stress and coping styles to psychological distress, three styles of coping were assessed: emotion-oriented (emotion-focused), task-oriented (problem-focused), and avoidance-oriented. Undergraduates ($n = 205$) completed questionnaires that measured students’ coping styles, recent life stressors, and psychological symptoms. Specifically, coping was measured by the Coping Inventory for Stressful Situations (Endler & Parker, 1990), a self-report measure that assesses the extent to which students engage in certain behaviors when reacting to difficult, stressful, or upsetting situations. Life stress was measured by the Life Experiences Survey (Sarason, Johnson, & Siegel, 1978), a 57-item self-report scale on which respondents indicate events that have occurred during the past year. Subjects were also asked to rate the extent to which they perceived each event to be positive or negative. Finally, psychological distress was measured with the Basic Personality Inventory (Jackson, 1989), a measure of both personality and psychopathology.

Results revealed that task-oriented (problem-focused) coping negatively predicted psychological distress for men and emotion-oriented (emotion-focused) coping positively predicted psychological distress for both men and women. Investigators concluded that the ability to approach life stress in a task-oriented (problem-focused) way was an asset whereas emotion-oriented coping was not an especially adaptive style of coping. These findings served as a springboard for the hypotheses of the present study in that it was predicted that under conditions of low problem-focused coping there would be a significant positive link between scores on the life stress inventory and scores of depression and anxiety.
Crockett and colleagues (2007) investigated relations between *acculturative stress* and psychological functioning and the buffering effect of social support and coping style in a sample of 148 Mexican American college students. Acculturative stress occurs when individuals from a minority culture experience problems arising from integrating into a mainstream culture. Latino college students are reported to experience substantially higher levels of stress, including financial, academic, and personal stress during their undergraduate years than do Anglo students (Quintana, Vogel, & Ybarra, 1991). Investigators predicted that acculturative stress would be associated with high levels of depressive and anxiety symptoms and that use of active coping styles (problem-focused) would reduce the effects of stress on psychological functioning. Students completed a set of questionnaires pertaining to acculturative stress, parent/peer support, coping style, and psychological functioning. More specifically, active (problem-focused) and avoidant (emotion-focused) coping styles were measured using a shortened version of the COPE inventory (Carver, Scheier, & Weintraub, 1989). Respondents were asked to indicate how frequently they used each strategy on a scale from 1 (never) to 5 (always). Hierarchical multiple regression analyses provided support for hypotheses and of particular relevance to the present study, a greater use of active coping strategies (problem-focused) in response to life stress was associated with fewer depressive symptoms, whereas a greater use of avoidant coping strategies (emotion-focused) was associated with more depressive and anxiety symptoms.

Coping style also has been studied as it relates to test anxiety and performance, another form of life stress for college students. Cohen and colleagues (2008) hypothesized that coping style would influence test anxiety and predict test performance in a sample of 216
first-year undergraduates. Students attending a major university in the north of Israel completed the COPE (Carver et al., 1989) as well as measures of test anxiety prior to taking final examinations. Test performance for students was reflected by the end-of-term examination grade. As hypothesized, emotion-focused and avoidance coping were positively related to test anxiety. In addition, problem-focused coping contributed positively to performance on the exams whereas avoidance coping adversely affected test grades. Findings are similar to those from other studies in which the use of problem-focused strategies was related to better performance on exams (Edwards & Trimble, 1992; Endler, Kantor, & Parker, 1994; Zeidner, 1995) and avoidance coping was negatively related to performance (Edwards & Trimble, 1992). Although test anxiety is different in nature from general anxiety investigated in the present study, these findings provide further support for the hypotheses posed in the current investigation. To summarize, based on these and other studies (Beasley, Thompson, & Davidson, 2003; Pizzolato, 2004), it is generally agreed that a problem-focused coping style is a more adaptive form of coping with various life stressors whereas using an emotion-focused coping style tends to be a less beneficial approach to life stressors experienced in the college setting.

**Coping in college with financial stress.** It is possible that college students react and cope differently to financial stress than they do to life stress. Studies have suggested that 15-19 year old adolescents use consistent patterns of coping strategies, but this consistency remains only within a certain domain (Wrzesniewski & Chylinska, 2007). In other words, young people may react differently when their problems pertain to school (or life in general) versus when their stressor is connected to their current financial situation. Characteristics of
the stressor may influence an individual’s selection of coping technique. One such characteristic is the perception of control one has in the face of life and financial stress.

**An introduction to perception of control/goodness of fit.** Not only will the properties of a particular stressor influence the selection of a coping technique, the individual’s own appraisal of that situation in relation to their personal control will impact the decision. The fit between the appraisal of controllability and coping is sometimes referred to as the *goodness of fit* (Folkman, 1984; Zeidner & Endler, 1996). Theoretically, appraisals of control call for greater proportions of active, problem-focused forms of coping, and appraisals of lack of control call for emotion-focused forms of coping. Although both problem-focused and emotion-focused coping are used with controllable and uncontrollable events by almost all individuals, studies indicate that coping efforts intended to alter the source of stress by acting on it directly (problem-focused) tend to be used in response to events appraised as controllable (see Compas et al., 1988), while palliative coping strategies to modulate emotional reactions (emotion-focused) are used when faced with events perceived as beyond personal control (see Forsythe & Compas, 1987; Wadsworth & Compas, 2002). Presumably, people who choose coping strategies that fit the appraised controllability of a task will have better outcomes than people who do not (Folkman & Moskowitz, 2004).

The present study investigated the relation between coping strategies and perception of control under conditions of both life and financial stress. Specifically, it was hypothesized that there would be a significant positive correlation between problem-focused coping and perception of control under conditions of life and financial stress and a negative correlation
between emotion-focused coping and perception of control under conditions of life and financial stress.

Lachman and Weaver (1998) examined social class differences in the sense of control in three samples of men and women ages 25-74 years. Researchers operationalized two dimensions of control: personal mastery and perceived constraints. Personal mastery referred to one’s sense of efficacy in carrying out goals and perceived constraints indicated to what extent one believed there were obstacles beyond one’s control that interfered with reaching goals. Measures pertaining to both dimensions of control as well as income and psychological and physical health were administered. Results of regression analyses showed that for all income groups, higher perceived mastery and lower perceived constraints were related to better health, greater life satisfaction, and lower depressive symptoms. Control played a moderating role; participants in the lowest income group with a high sense of control showed levels of health and well-being comparable to the higher income groups. The discussion of Lachman and Weaver’s (1998) investigation is important to the present study in regards to the generation of hypotheses. It was predicted that under conditions of life and financial stress, perception of control would be related to mental health functioning. Specifically, a significant negative correlation was expected between perception of control and depression and anxiety for both life and financial stress. These hypotheses are consistent with Lachman and Weaver’s (1998) work that suggested sense of control was beneficial for all three income groups despite social class.

The stress of economic hardship can be thought of as one over which adolescents have little control. For example, Elder and Caspi (1988) discussed the process of adaptation
to economic changes in the 1930s as involving a family’s experience of loss of control over finances and efforts to regain control. A few studies document the utility of problem-focused coping only under conditions of high controllability (see Thurber & Weisz, 1997) and suggest that secondary control strategies (or emotion-focused coping) may be especially important for coping with economic strain (see Wadsworth & Compas, 2002). This discussion of the goodness of fit is relevant to the present study because it provides support for several of the generated hypotheses. Among these hypotheses is the final objective to determine if perception of control and coping strategies interact to predict mental health outcomes for college students. This interaction has been investigated in previous studies with a range of ages and stressors (Christensen, Benotsch, Wiebe, & Lawton, 1995; Clarke, 2006; Compas et al., 1988; Forsythe & Compas, 1987; Wadsworth & Compas, 2002); however, this author is not aware of any study conducted on college students’ coping with financial stress that has examined such an interaction.

**Coping with financial stress according to the adolescent perspective.**

Although there is ample evidence that family financial stress has an influence on child and adolescent functioning by way of its effects on parents (i.e., Conger & Conger, 2002), less research has been done to show the direct burden that financial stress places on adolescents (Wadsworth & Compas, 2002). In order to understand the efficacy of coping strategies in alleviating adolescents’ financial stress, more research has to be done.

This author is only aware of one set of studies pertaining to the adolescent perspective when coping with financial stress (Wadsworth & Berger, 2006; Wadsworth & Compas, 2002; Wadsworth, Raviv, Compas, & Connor-Smith, 2005). No studies could be found that
investigated the relation between coping styles and financial stress among college students. Two of Wadsworth’s studies are summarized below; however, the nomenclature for coping style is different from the present study’s nomenclature. Specifically, Wadsworth identifies three dimensions of coping: primary control (similar to problem-focused), secondary control (similar to emotion-focused), and disengagement coping (some components are similar to emotion-focused). Primary control coping consists of strategies used to directly alter a stressful problem or one’s emotional reactions to it, such as problem solving. Secondary control coping includes strategies that reflect attempts to adapt oneself to the stressful circumstance (e.g., distraction, positive thinking). Finally, disengagement coping includes strategies that orient an individual away from a stressful circumstance and includes avoidance and denial.

Wadsworth and Compas (2002) examined the associations among family SES, perceived economic strain, family conflict, and coping responses in adolescents. Participants were 364, 7th through 12th grade students in rural northeastern New England with a mean age of 14.7 years. Stress and coping were measured by the Responses to Stress Questionnaire (RSQ; Connor-Smith, Compas, Wadsworth, Thomsen, & Saltzman, 2000). The RSQ assesses the ways in which adolescents cope with economic strain and family conflict and is divided into two sections. The first section measures the amount of stress experienced by adolescents. Adolescents are asked to indicate on a 4-point Likert scale how often in the last six months they have experienced 16 stressful events (eight items for family conflict and eight items for economic strain). The second section of the RSQ measures adolescents’ coping response to those stressors. An adolescent’s coping style is represented by three main types of coping:
primary (problem-focused), secondary (emotion-focused), and disengagement (some components are similar to emotion-focused). Finally, information regarding adolescents’ anxious/depressed and aggressive behavior was gathered using the Youth Self Report (Achenbach, 1991), a 112-item self-report measure of youth problem behaviors.

Two theoretical models were tested using structural equation modeling; one model tested coping as a mediator of the relation between stress and psychopathology and the second model tested coping as a moderator. Based on analyses, researchers identified primary (problem-focused) and secondary control (emotion-focused) coping as being associated with fewer anxiety/depression symptoms and aggression problems in the face of family and financial stressors. Although both primary and secondary control coping predicted fewer adjustment problems, secondary control (emotion-focused) coping was used more often and accounted for more variance in adjustment problems than did primary control (problem-focused) coping. Wadsworth and Compas suggested that secondary control (emotion-focused) strategies were the most efficacious type of coping for low-control stressors such as financial stressors. The authors encouraged future studies to focus on the use of coping strategies that mediate or moderate the relation between economic strain and adjustment problems for adolescents. The present study contributes to this small research base by examining the link between financial stress and mental health functioning as it is moderated by coping style in a sample of college students.

A follow-up study conducted in 2005 (Wadsworth et al.) from the same sample of participants tested several models of the relations among economic strain, life stress, coping, involuntary stress responses, and psychological symptoms. The only difference in the sample
for this study was the inclusion of the parents of the adolescents. A total of 57 parent-adolescent dyads were recruited. Parents and adolescents completed the 9-item Life Stress Questionnaire (LSQ), a compilation of items from the Life Events Questionnaire (Garmezy, Masten, & Tellegen, 1984) and the Adolescent Perceived Events Scale (Compas, Davis, Forsythe, & Wagner, 1987). The LSQ was used to assess the number of stressful life events experienced by parents and adolescents and their perceptions of the severity of these stressors. To measure economic strain, parents were asked how often they experienced each of five financial stressors (e.g., difficulty paying bills) in the last six months. Adolescents’ economic strain and coping styles for parents and adolescents were measured by the RSQ as described above. Finally, parents completed the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982) and the Child Behavior Checklist (Achenbach, 1991) as measures of psychological symptoms of parents and adolescents, respectively.

Several significant findings emerged. Economic strain was a predictor of both internalizing and externalizing behaviors of adolescents. Stressful life events added a significant increment to the prediction of both internalizing and externalizing problems for adolescents, above and beyond the contribution made by economic strain. These findings have several implications for the present study. One, the relation between financial stress and mental health functioning for college students was expected to be significant. Two, since the prediction of psychological symptoms for adolescents was notably different when using life events versus economic strain; additional support is found for a difference between life and financial stress. Finally, Wadsworth and colleagues provided evidence that secondary control coping (emotion-focused) strategies were optimal responses to uncontrollable stressors as
evidenced by fewer psychological symptoms for both parents and adolescents in the face of economic stress. This is relevant to the present study because it provides support for the generated hypotheses. Specifically, it was predicted that under conditions of low emotion-focused coping there would be a significant positive link between scores on the financial stress questionnaire and scores on measures of depression and anxiety.
CHAPTER THREE

Statement of the Problem

Past research indicates that mental health problems of university students are on the increase. Studies suggest that psychological distress among university students is significantly higher than among the general population, and even among students’ working peers. The transition to college is easy for some students, but for many others the shift can be too sudden and drastic, leaving them with feelings of uncertainty. College can be a very stressful process for students and that stress can have negative academic as well as mental health consequences. Therefore, it is important to provide students with skills and strategies that may help them successfully manage stress.

A useful approach to examining stress in college students is the interactional approach. The interactional model states that while the environment affects the individual, individuals also actively affect their own environments (Shih & Eberhart, 2008). In regards to coping, the interactional stress and coping model puts forward the idea that adaptation to a stressor is influenced by the coping processes in which people engage following that stressor. An important assumption of this model is that coping effectiveness is dependent on the “match” between coping strategies and individual characteristics such as the appraisal of the stressor (e.g., controllability). Past research indicates that coping strategies appear to differ for events appraised as controllable versus uncontrollable. In general, studies have indicated that coping efforts intended to alter the source of stress by acting on it directly (problem-focused coping) tend to be used more with events appraised as controllable, while palliative
coping strategies to modulate emotional reactions (emotion-focused coping) are used more with events perceived as beyond personal control.

The purpose of the present study was to examine the relation between life and financial stress of college students and mental health functioning. In addition, factors that potentially exacerbated or diminished the relation between stress and poor mental health functioning were investigated; those factors included perception of control and the degree to which individuals used emotion-focused and problem-focused coping strategies. This study was based on past research that suggested that individuals, in the face of life stress, likely employ a problem-focused coping style in order to ameliorate the effects of the stressor. In regards to financial stress, there have been very few investigations of coping effectiveness. Studies from Wadsworth and colleagues have provided evidence that emotion-focused strategies are optimal responses to uncontrollable stressors as illustrated by fewer psychological symptoms in response to economic stress. Thus, the primary purpose of the present study was to add to the existing research on life stress in the college population as well as contribute to the growing literature related to coping with financial stress. Most importantly, to the author’s knowledge, this study was the first to investigate the effectiveness of various coping styles for college students experiencing financial stress.

**Hypotheses**

In the current study, the following objectives and accompanying hypotheses were tested:

**Objective 1: To determine if life and financial stress predict mental health functioning.**

H1: Does *life stress* predict mental health functioning?
a) Life stress will account for a significant amount of the variance in depressive symptoms such that higher scores on the College Life Stress Inventory will predict higher levels of depression.

b) Life stress will account for a significant amount of the variance in anxiety symptoms such that higher scores on the College Life Stress Inventory will predict higher levels of anxiety.

H2: Does financial stress predict mental health functioning?

a) Financial stress will account for a significant amount of the variance in depressive symptoms such that higher scores on the Financial Stress Questionnaire will predict higher levels of depression.

b) Financial stress will account for a significant amount of the variance in anxiety symptoms such that higher scores on the Financial Stress Questionnaire will predict higher levels of anxiety.

Objective 2: To determine if coping style moderates the relation between life and financial stress and mental health functioning.

H3: Does emotion-focused coping style moderate the relation between life stress and mental health functioning?

a) The interaction of emotion-focused coping and life stress will be a significant predictor of depression. Specifically, under conditions of high emotion-focused coping there will be a significant positive link between scores on the College Life Stress Inventory and depression.
b) The interaction of emotion-focused coping and life stress will be a significant predictor of anxiety. Specifically, under conditions of high emotion-focused coping there will be a significant positive link between scores on the College Life Stress Inventory and anxiety.

H4: Does problem-focused coping style moderate the relation between life stress and mental health functioning?

a) The interaction of problem-focused coping and life stress will be a significant predictor of depression. Specifically, under conditions of low problem-focused coping there will be a significant positive link between scores on the College Life Stress Inventory and depression.

b) The interaction of problem-focused coping and life stress will be a significant predictor of anxiety. Specifically, under conditions of low problem-focused coping there will be a significant positive link between scores on the College Life Stress Inventory and anxiety.

H5: Does emotion-focused coping style moderate the relation between financial stress and mental health functioning?

a) The interaction of emotion-focused coping and financial stress will be a significant predictor of depression. Specifically, under conditions of low emotion-focused coping there will be a significant positive link between scores on the Financial Stress Questionnaire and depression.

b) The interaction of emotion-focused coping and financial stress will be a significant predictor of anxiety. Specifically, under conditions of low emotion-
focused coping there will be a significant positive link between scores on the Financial Stress Questionnaire and anxiety.

H6: Does problem-focused coping style moderate the relation between financial stress and mental health functioning?

a) The interaction of problem-focused coping and financial stress will be a significant predictor of depression. Specifically, under conditions of high problem-focused coping there will be a significant positive link between scores on the Financial Stress Questionnaire and depression.

b) The interaction of problem-focused coping and financial stress will be a significant predictor of anxiety. Specifically, under conditions of high problem-focused coping there will be a significant positive link between scores on the Financial Stress Questionnaire and anxiety.

Objective 3: To investigate if coping strategies are related to perception of control.

H7: Under conditions of life stress, is coping style related to perception of control?

a) There will be a significant positive correlation between problem-focused coping and perception of control such that higher scores on the problem-focused coping measure will be associated with higher scores on the measure of perception of control.

b) There will be a significant negative correlation between emotion-focused coping and perception of control such that higher scores on the emotion-focused coping measure will be associated with lower scores on the measure of perception of control.
H8: Under conditions of financial stress, is coping style related to perception of control?

a) There will be a significant positive correlation between problem-focused coping and perception of control such that higher scores on the problem-focused coping measure will be associated with higher scores on the measure of perception of control.

b) There will be a significant negative correlation between emotion-focused coping and perception of control such that higher scores on the emotion-focused coping measure will be associated with lower scores on the measure of perception of control.

Objective 4: To determine if perception of control is related to mental health outcomes.

H9: Under conditions of life stress, is perception of control related to mental health functioning?

a) There will be a significant negative correlation between perception of control and depression such that higher scores on the measure of perception of control will be associated with lower levels of depression.

b) There will be a significant negative correlation between perception of control and anxiety such that higher scores on the measure of perception of control will be associated with lower levels of anxiety.

H10: Under conditions of financial stress, is perception of control related to mental health functioning?
a) There will be a significant negative correlation between perception of control and *depression* such that higher scores on the measure of perception of control will be associated with lower levels of depression.

b) There will be a significant negative correlation between perception of control and *anxiety* such that higher scores on the measure of perception of control will be associated with lower levels of anxiety.

**Objective 5: To determine if perception of control and coping strategies interact to predict mental health outcomes.**

H11: Under conditions of *life stress*, does the interaction of coping strategies and perception of control predict mental health outcomes?

a) The interaction of *emotion-focused* coping and perception of control will be a significant predictor of depression such that high scores on emotion-focused coping measure will exacerbate the link between low levels of perceived control and depression.

b) The interaction of *emotion-focused* coping and perception of control will be a significant predictor of anxiety such that high scores on emotion-focused coping measure will exacerbate the link between low levels of perceived control and anxiety.

c) The interaction of *problem-focused* coping and perception of control will be a significant predictor of depression such that high scores on problem-focused coping measure will weaken the link between low levels of perceived control and depression.
d) The interaction of problem-focused coping and perception of control will be a significant predictor of anxiety such that high scores on problem-focused coping measure will weaken the link between low levels of perceived control and anxiety.

H12: Under conditions of financial stress, does the interaction of coping strategies and perception of control affect mental health outcomes?

a) The interaction of emotion-focused coping and perception of control will be a significant predictor of depression such that high scores on emotion-focused coping measure will weaken the link between low levels of perceived control and depression.

b) The interaction of emotion-focused coping and perception of control will be a significant predictor of anxiety such that high scores on emotion-focused coping measure will weaken the link between low levels of perceived control and anxiety.

c) The interaction of problem-focused coping and perception of control will be a significant predictor of depression such that high scores on problem-focused coping measure will exacerbate the link between low levels of perceived control and depression.

d) The interaction of problem-focused coping and perception of control will be a significant predictor of anxiety such that high scores on problem-focused coping measure will exacerbate the link between low levels of perceived control and anxiety.
CHAPTER FOUR

Method

Participants

Participants were 343 (157 male, 186 female) undergraduate volunteers enrolled in either an Introductory Psychology course or an upper level Psychology course (299 from Introductory Psychology and 70 from upper level course) at a large southeastern university during the Summer and Fall 2009 semesters. Twenty-six cases were deleted from the final sample because of missing data (they did not complete 50% of the study questions); however, no significant differences were found in demographic characteristics between these 26 cases and the final cases.

The sample was 83% Caucasian, 8% African American, and 9% of another ethnicity. The current sample was representative of the university; approximately 80% of incoming freshmen have been classified as Caucasian since 2004. Participant ages ranged from 18 to 27 (mean = 19.17, SD = 1.52), with 51% classified as freshman, 24% as sophomores, 14% juniors, and 11% seniors and/or nontraditional. Of note, one participant for the present study was 46 years of age. It was decided to retain this participant for analyses because the participant’s scores on study variables were not considered outliers. Fifty-five percent (55%) of the participants reported that they were unemployed, while 42% reported part-time employment. The majority of the sample reported being single (97%) and living in a dormitory (59%).

Procedures
Participants were recruited two ways. One, participants \((n = 299)\) were recruited from the Introduction to Psychology course via a web site established for the purpose of recruiting research participants. This web site lists many experiments available for participation for research credit. As part of requirements for the Introduction to Psychology course, participants must complete either six research credit hours or a three-page journal article review. Subjects who participated in the research through an Introduction to Psychology course earned two research credits. If Introduction to Psychology participants did not attend their scheduled session or did not cancel with more than 24 hours notice they had one credit hour deducted from their total research credits, in accordance with course expectations.

The Introduction to Psychology course typically contains a large number of freshmen and sophomores; therefore, to recruit juniors and seniors, instructors of 15 upper level undergraduate courses were asked to administer questionnaires to students. Those subjects \((n = 70)\) participated on a voluntary basis and some were offered extra credit points for participation; the course instructor made that decision. An email was sent to instructors at the beginning of the Summer and Fall 2009 semesters requesting help with participant recruitment for the current study. Willing instructors were sent a script (see Appendix A) that served as an introduction to the study along with the website link to give interested participants. In order to track participation and extra credit points, subjects were prompted at the end of the survey to print out a confirmation page validating their participation in this study.

Approval from the university’s institutional review board was obtained before data collection and all participants completed an online informed consent form prior to the start of
data collection. Data collection took place via online questionnaires. Participants were able to complete all questionnaires in approximately 60 minutes.

Instrumentation

Instruments were administered in a fixed order due to logistical constraints of the Web survey. There were two versions of the online questionnaire to reduce potential effects of participant fatigue; that is, half the sample completed measures of life stress first and the other half completed measures of financial stress first. Both versions of the questionnaire began with the informed consent, followed by questions related to demographic information. Next, participants either completed the measure of life stress followed by the measure of coping with life stress or they completed the measure of financial stress followed by the measure of coping with financial stress. After the measures of stress and coping, participants completed the measure of mental health functioning. Copies of all non-copyrighted measures are available in Appendix B.

Measures of stress

Life stress. College life stress was measured using the 28-item College Undergraduate Stress Scale (CUSS; Renner & Mackin, 1998) created as an alternative to the more commonly used Social Readjustment Rating Scale (Holmes & Rahe, 1967). The CUSS includes more common stressors specifically affecting traditional-age college students. Examples of items from the CUSS are “Oversleeping for an exam” and “Dealing with parents.” For the present study, participants were asked to indicate whether or not each event happened to them in the most recent past semester or current semester by placing a check mark in the corresponding blank. If participants indicated an event happened to them,
perception of that stressor was then assessed by asking participants to rate how stressful that event was on a 5-point Likert scale ranging from 0 = “not applicable/not at all stressful” to 4 = “very stressful.” The Total life events variable was calculated by summing the number of stressors experienced. The possible range of Likert scale responses for perception of stress was from 0 to 116, with higher scores indicating greater perception of stress.

Renner and Mackin (1998) administered this measure to 257 participants in three sections of an Introductory Psychology course from a state-assisted university of approximately 12,000 students. A local set of norms is offered to illustrate the types of scores generated by this instrument. With respect to internal reliability, Cronbach’s alpha for the current sample was .74. Two additional studies have been conducted using the CUSS and the instrument was deemed useful for their purposes (Clarke, in press; Mason & Smithey, in press).

**Financial stress.** Based on the indicators used by Drentea (2000) to measure economic strain in adults, I developed a Financial Stress Questionnaire (FSQ) to capture participants’ financial stress. The FSQ was developed and used in an unpublished study in March 2009. The FSQ yielded three overall indicators of financial stress: credit card debt, other debt, and stress about overall debt. Two of these three indicators were used in Drentea’s study as a measure of economic strain. “Other debt” was included in this study as a measure of participants’ financial stress because of its particular relevance to college students.

Credit card debt was originally represented by three separate components; however, due to lack of variability in participants’ responses, two of the three components (unpaid...
balance and default) were dropped from the final indicator. The sole component of credit card debt for the current study was the participants’ debt/income ratio. This ratio represented the amount of credit card debt owed in relation to one’s total income. Participants were asked “Right now, approximately what is the total amount you owe on all your credit cards after your most recent payments?” Participants then indicated the approximate monetary value of this amount. Since the impact of credit card debt is relative to one’s income, participants were asked to provide their total monthly income. Credit card debt was divided by income to determine the proportion of credit card debt to income. This ratio should more accurately reflect financial stress than credit card debt alone (Drentea, 2000).

Other (non-credit card) debt was the second indicator used to measure financial stress. For the present study, participants were asked to indicate the total amount of other debt (excluding credit cards) currently owed. Categories of other debt included student loans, car/truck loans, cash loans, mortgages, non-credit/charge card debt, and other. Monetary values were added across all categories to represent total other debt.

Finally, stress about overall debt was the third indicator of financial stress. Participants were asked the following: (1) “Overall, how often do you worry about the total amount you owe in overall debt?” (2) “How much stress does the total debt you are carrying cause you?” (3) “How concerned are you that you will never be able to pay off these debts?” To answer each question, participants used a 5-point scale, with higher scores representing greater stress. The overall potential range of scores was 0-12.

In order to combine the three indicators into one financial stress index score, raw scores from each indicator were first standardized into z scores. Prior to combining the
standardized scores into an overall composite, correlation analyses were conducted among all standardized scores. Given that all scores were significantly intercorrelated ($r’s = .2$ to $.4$ $p < .01$) the final step was to take the average standardized z score from each subject to form an overall financial stress composite score.

To obtain test-retest reliability information for the FSQ, 25 participants returned one week after first completing the questionnaire (Time 1) to complete the same survey a second time (Time 2). Pearson’s product moment correlations were calculated between the raw scores at Time 1 and Time 2 for each of the three indicators of financial stress: credit card debt (debt/income ratio) ($r = .99$), other debt ($r = .99$), and stress about overall debt ($r = .91$). As indicated, scores were highly stable over the interval of one week.

**Perception of control**

Perceived controllability. The measurement of perceived controllability used a slightly different approach for life and financial stress. For life stress, participants were asked to rate their perceived control for each stressful life event on the CUSS according to a 5-point Likert scale. Specifically, participants responded to the prompt “rate how much control you felt you had over this situation” for each of the 28 life stressors. The total range of scores for life stress were $0 – 112$ with higher numbers representing more perceived control. For financial stress, two questions were included at the end of the financial stress measure to assess participants’ perceived controllability over the stressor. This procedure is similar to methods used in previous studies to measure perception of control (e.g., Causey & Dubow, 1992; Compas et al., 1988). Specifically, participants responded to the lead, “When you experience stress related to your finances...,” followed by two questions, which were rated on
a 5-point Likert scale, “How often do you think you can do something to change this situation?” and “How much control do you feel you have over this situation?” The total range of scores were 0 - 8 with higher numbers representing more perceived control under conditions of financial stress. With respect to internal consistency, Cronbach’s alphas for the current sample were .73 for controllability of life stress and .54 for controllability of financial stress.

Coping

Coping was assessed with a revised version of the Ways of Coping Questionnaire (WCQ; Folkman & Lazarus, 1985). The revised version differs from the original (Folkman & Lazarus, 1980) in that redundant and unclear items were deleted or reworded; several items were added; and the response format was changed from yes-no to a 4-point Likert scale (0 = does not apply and/or is not used; 1 = used somewhat; 2 = used quite a bit; 3 = used a great deal). The WCQ has been called the “gold standard of coping measurement in research designs” (Snyder & Dinoff, 1999, p. 11) because of its flexibility with different populations as well as its alignment with the theoretical foundation of coping styles from Lazarus and Folkman (1984). The 66-item questionnaire instructs participants to, “Please read each item below and indicate, according to the below scale, to what extent you used it when dealing with stress.” In the present study participants completed the WCQ questionnaire for life stress (e.g., studying for an exam or arguing with a roommate) and for financial stress (e.g., not having enough money to do something they would like to do), and indicated the extent to which they would use each strategy under these stressful situations.
Prior factor analyses of the WCQ (Aldwin & Revenson, 1987; Folkman & Lazarus, 1985; Folkman et al., 1986; Sorlie & Sexton, 2001) differentiated problem-focused factors (e.g., trying to come up with several solutions to the problem, making a plan of action and following it) and emotion-focused factors (e.g., distancing, avoiding, and self-blame). As recommended by Lazarus and Folkman (1984), a principal components analysis (PCA) was performed to examine the factor structure of the 66 items. A separate analysis was performed for each type of stress. Prior to performing the analysis, the suitability of the data was assessed. With respect to the correlation matrix, the variables were intercorrelated (numerous coefficients were above .5). The intercorrelations were further examined by using the Bartlett’s Test of Sphericity. This test reached statistical significance for both types of stress, indicating that the correlation matrix was not an identity matrix. Furthermore, possible multicollinearity among the variables was detected via the determinant of the correlation matrix. Based on the determinant values of 0.000461 and 0.000430 (financial stress and life stress, respectively) none of the correlation coefficients were particularly large (needed to be greater than the necessary value of 0.00001) indicating that multicollinearity was not a problem (Field, 2000). In addition, the Kaiser-Meyer-Olkin values for sampling adequacy were .86 (life stress) and .96 (financial stress), exceeding the recommended values of .60 (Tabachnick & Fidell, 1996). Based on the above data screening, it was determined that there was no need to eliminate questions from the WCQ at this stage and that factor analyses were appropriate for these data.

The initial PCA for coping with life stress revealed the presence of 17 components with eigenvalues greater than 1.0; however, an inspection of the screeplot displayed a break
after the eighth component. The eight-factor solution explained 47% of the total variance. For coping with financial stress, the PCA revealed the presence of ten components with eigenvalues greater than 1.0; however, the screeplot displayed a clear break after the 3rd component. The three-factor solution explained 51% of the total variance. Unfortunately, upon review of the individual scales for theoretical consistency, it was determined that items loading onto the same factor were not conceptually related. In other words, a common construct was not found for any of the factors, limiting their interpretability.

To determine the factor structure for coping with stress in the current study, I drew on several studies (Aldwin & Revenson, 1987; Folkman & Lazarus, 1985; Sørlie & Sexton, 2001; Tobin, Holroyd, Reynolds, & Wigal, 1989) that generally revealed an eight-factor solution. For the current study, rational sorting was used (for review, see Skinner, Edge, Altman, & Sherwood, 2003) and items that shared common features were placed into one of these eight factors based on face validity. The eight factors were as follows: Confrontive coping (6 items; “Stood my ground and fought for what I wanted”), Distancing (6 items; “Made light of the situation; refused to get serious about it”), Self-controlling (7 items; “I tried to keep my feelings to myself”), Seeking social support (5 items; “Talked to someone about how I was feeling”), Accepting responsibility (4 items; “I apologized or did something to make up”), Escape-Avoidance (8 items; “Slept more than usual”), Planful problem-solving (6 items; “I knew what had to be done, so I doubled my efforts to make things work”), and Positive reappraisal (7 items; “Rediscovered what is important in life”). Tables 1 and 2 provide a summary of the percentage of variance explained by each factor in addition to factor and item loadings for life and financial stress.
Table 1.

*Final Factor and Item Loadings for Ways of Coping Questionnaire; Life Stress*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Confrontive coping</strong> (variance explained = 52.1%; alpha = .70)</td>
<td></td>
</tr>
<tr>
<td>7. Tried to get person responsible to change his/her mind.</td>
<td>.51</td>
</tr>
<tr>
<td>17. I expressed anger to the person(s) who caused the problem.</td>
<td>.51</td>
</tr>
<tr>
<td>46. Stood my ground and fought for what I wanted.</td>
<td>.43</td>
</tr>
<tr>
<td>28. I let my feelings out somehow.</td>
<td>.41</td>
</tr>
<tr>
<td>34. Took a big chance or did something very risky.</td>
<td>.39</td>
</tr>
<tr>
<td>6. I did something which I didn’t think would work, but at least I was doing something.</td>
<td>.33</td>
</tr>
<tr>
<td><strong>2. Distancing</strong> (variance explained = 11.5%; alpha = .69)</td>
<td></td>
</tr>
<tr>
<td>44. Made light of the situation; refused to get serious about it.</td>
<td>.50</td>
</tr>
<tr>
<td>13. Went on as if nothing had happened.</td>
<td>.49</td>
</tr>
<tr>
<td>21. Tried to forget the whole thing.</td>
<td>.43</td>
</tr>
<tr>
<td>15. Looked for the silver lining, so to speak; tried to look on the bright side of things.</td>
<td>.40</td>
</tr>
<tr>
<td>41. Didn’t let it get to me; refused to think about it too much.</td>
<td>.40</td>
</tr>
<tr>
<td>12. Went along with fate; sometimes I just have bad luck.</td>
<td>.30</td>
</tr>
<tr>
<td><strong>3. Self-controlling</strong> (variance explained = 10.8%; alpha = .65)</td>
<td></td>
</tr>
<tr>
<td>10. Tried not to burn my bridges, but leave things open somewhat.</td>
<td>.46</td>
</tr>
<tr>
<td>54. I tried to keep my feelings from interfering with other things too much.</td>
<td>.43</td>
</tr>
<tr>
<td>62. I went over in my mind what I would say or do.</td>
<td>.40</td>
</tr>
<tr>
<td>43. Kept others from knowing how bad things were.</td>
<td>.36</td>
</tr>
<tr>
<td>14. I tried to keep my feelings to myself.</td>
<td>.34</td>
</tr>
<tr>
<td>35. I tried not to act too hastily or follow my first hunch.</td>
<td>.30</td>
</tr>
<tr>
<td>63. I thought about how a person I admire would handle the situation and used that as a model.</td>
<td>.28</td>
</tr>
<tr>
<td><strong>4. Seeking social support</strong> (variance explained = 6.8%; alpha = .76)</td>
<td></td>
</tr>
<tr>
<td>45. Talked to someone about how I was feeling.</td>
<td>.61</td>
</tr>
<tr>
<td>42. I asked a relative or friend I respected for advice.</td>
<td>.59</td>
</tr>
<tr>
<td>8. Talked to someone to find out more about the situation.</td>
<td>.52</td>
</tr>
<tr>
<td>31. Talked to someone who could do something concrete about the problem.</td>
<td>.48</td>
</tr>
<tr>
<td>18. Accepted sympathy and understanding from someone.</td>
<td>.43</td>
</tr>
<tr>
<td><strong>5. Accepting responsibility</strong> (variance explained = 5.9%; alpha = .62)</td>
<td></td>
</tr>
<tr>
<td>29. Realized I brought the problem on myself.</td>
<td>.46</td>
</tr>
</tbody>
</table>
Table 1. Continued

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>Criticized or lectured myself.</td>
<td>0.40</td>
</tr>
<tr>
<td>25.</td>
<td>I apologized or did something to make up.</td>
<td>0.37</td>
</tr>
<tr>
<td>51.</td>
<td>I made a promise to myself that things would be different next time.</td>
<td>0.37</td>
</tr>
</tbody>
</table>

6. **Escape-Avoidance** (variance explained = 4.8%; alpha = .71)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>59.</td>
<td>Had fantasies or wishes about how things might turn out.</td>
<td>0.52</td>
</tr>
<tr>
<td>58.</td>
<td>Wished that the situation would go away or somehow be over with.</td>
<td>0.49</td>
</tr>
<tr>
<td>47.</td>
<td>Took it out on other people.</td>
<td>0.44</td>
</tr>
<tr>
<td>50.</td>
<td>Refused to believe that it had happened.</td>
<td>0.42</td>
</tr>
<tr>
<td>11.</td>
<td>Hoped a miracle would happen.</td>
<td>0.40</td>
</tr>
<tr>
<td>33.</td>
<td>Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.</td>
<td>0.37</td>
</tr>
<tr>
<td>40.</td>
<td>Avoided being with people in general.</td>
<td>0.33</td>
</tr>
<tr>
<td>16.</td>
<td>Slept more than usual.</td>
<td>0.30</td>
</tr>
</tbody>
</table>

7. **Planful problem-solving** (variance explained = 4.3%; alpha = .78)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>52.</td>
<td>Came up with a couple of different solutions to the problem.</td>
<td>0.63</td>
</tr>
<tr>
<td>49.</td>
<td>I knew what had to be done, so I doubled my efforts to make things work.</td>
<td>0.57</td>
</tr>
<tr>
<td>26.</td>
<td>I made a plan of action and followed it.</td>
<td>0.55</td>
</tr>
<tr>
<td>48.</td>
<td>Drew on my past experiences when I was in a similar position before.</td>
<td>0.55</td>
</tr>
<tr>
<td>39.</td>
<td>Changed something so things would turn out all right.</td>
<td>0.52</td>
</tr>
<tr>
<td>1.</td>
<td>Just concentrated on what I had to do next – the next step.</td>
<td>0.35</td>
</tr>
</tbody>
</table>

8. **Positive reappraisal** (variance explained = 4.0%; alpha = .76)

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.</td>
<td>Changed or grew as a person in a good way.</td>
<td>0.60</td>
</tr>
<tr>
<td>38.</td>
<td>Rediscovered what is important in life.</td>
<td>0.57</td>
</tr>
<tr>
<td>36.</td>
<td>Found new faith.</td>
<td>0.52</td>
</tr>
<tr>
<td>56.</td>
<td>Changed something about myself.</td>
<td>0.50</td>
</tr>
<tr>
<td>30.</td>
<td>I came out of the experience better than when I went in.</td>
<td>0.47</td>
</tr>
<tr>
<td>20.</td>
<td>I was inspired to do something creative.</td>
<td>0.39</td>
</tr>
<tr>
<td>60.</td>
<td>I prayed.</td>
<td>0.34</td>
</tr>
</tbody>
</table>
Table 2.

**Final Factor and Item Loadings for Ways of Coping Questionnaire; Financial Stress**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Confrontive coping</strong> (variance explained = 72.5%; alpha = .83)</td>
<td></td>
</tr>
<tr>
<td>7. Tried to get person responsible to change his/her mind.</td>
<td>.65</td>
</tr>
<tr>
<td>6. I did something which I didn’t think would work, but at least I was doing something.</td>
<td>.61</td>
</tr>
<tr>
<td>17. I expressed anger to the person(s) who caused the problem.</td>
<td>.60</td>
</tr>
<tr>
<td>46. Stood my ground and fought for what I wanted.</td>
<td>.60</td>
</tr>
<tr>
<td>28. I let my feelings out somehow.</td>
<td>.57</td>
</tr>
<tr>
<td>34. Took a big chance or did something very risky.</td>
<td>.55</td>
</tr>
<tr>
<td><strong>2. Distancing</strong> (variance explained = 8.0%; alpha = .81)</td>
<td></td>
</tr>
<tr>
<td>13. Went on as if nothing had happened.</td>
<td>.66</td>
</tr>
<tr>
<td>21. Tried to forget the whole thing.</td>
<td>.58</td>
</tr>
<tr>
<td>12. Went along with fate; sometimes I just have bad luck.</td>
<td>.57</td>
</tr>
<tr>
<td>44. Made light of the situation; refused to get serious about it.</td>
<td>.56</td>
</tr>
<tr>
<td>15. Looked for the silver lining, so to speak; tried to look on the bright side of things.</td>
<td>.54</td>
</tr>
<tr>
<td>41. Didn’t let it get to me; refused to think about it too much.</td>
<td>.49</td>
</tr>
<tr>
<td><strong>3. Self-controlling</strong> (variance explained = 5.5%; alpha = .85)</td>
<td></td>
</tr>
<tr>
<td>54. I tried to keep my feelings from interfering with other things too much.</td>
<td>.68</td>
</tr>
<tr>
<td>62. I went over in my mind what I would say or do.</td>
<td>.64</td>
</tr>
<tr>
<td>14. I tried to keep my feelings to myself.</td>
<td>.62</td>
</tr>
<tr>
<td>10. Tried not to burn my bridges, but leave things open somewhat.</td>
<td>.61</td>
</tr>
<tr>
<td>43. Kept others from knowing how bad things were.</td>
<td>.60</td>
</tr>
<tr>
<td>35. I tried not to act too hastily or follow my first hunch.</td>
<td>.59</td>
</tr>
<tr>
<td>63. I thought about how a person I admire would handle the situation and used that as a model.</td>
<td>.54</td>
</tr>
<tr>
<td><strong>4. Seeking social support</strong> (variance explained = 3.5%; alpha = .85)</td>
<td></td>
</tr>
<tr>
<td>42. I asked a relative or friend I respected for advice.</td>
<td>.72</td>
</tr>
<tr>
<td>45. Talked to someone about how I was feeling.</td>
<td>.70</td>
</tr>
<tr>
<td>8. Talked to someone to find out more about the situation.</td>
<td>.64</td>
</tr>
<tr>
<td>31. Talked to someone who could do something concrete about the problem.</td>
<td>.63</td>
</tr>
<tr>
<td>18. Accepted sympathy and understanding from someone.</td>
<td>.60</td>
</tr>
<tr>
<td><strong>5. Accepting responsibility</strong> (variance explained = 3.4%; alpha = .81)</td>
<td></td>
</tr>
<tr>
<td>51. I made a promise to myself that things would be different next time.</td>
<td>.68</td>
</tr>
</tbody>
</table>
Table 2. Continued.

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. Realized I brought the problem on myself.</td>
<td>.66</td>
</tr>
<tr>
<td>9. Criticized or lectured myself.</td>
<td>.60</td>
</tr>
<tr>
<td>25. I apologized or did something to make up.</td>
<td>.54</td>
</tr>
</tbody>
</table>

6. **Escape-Avoidance** (variance explained = 2.8%; alpha = .86)

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>58. Wished that the situation would go away or somehow be over with.</td>
<td>.70</td>
</tr>
<tr>
<td>59. Had fantasies or wishes about how things might turn out.</td>
<td>.68</td>
</tr>
<tr>
<td>40. Avoided being with people in general.</td>
<td>.65</td>
</tr>
<tr>
<td>11. Hoped a miracle would happen.</td>
<td>.60</td>
</tr>
<tr>
<td>47. Took it out on other people.</td>
<td>.60</td>
</tr>
<tr>
<td>50. Refused to believe that it had happened.</td>
<td>.58</td>
</tr>
<tr>
<td>33. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.</td>
<td>.58</td>
</tr>
<tr>
<td>16. Slept more than usual.</td>
<td>.56</td>
</tr>
</tbody>
</table>

7. **Planful problem-solving** (variance explained = 2.6%; alpha = .88)

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>49. I knew what had to be done, so I doubled my efforts to make things work.</td>
<td>.75</td>
</tr>
<tr>
<td>39. Changed something so things would turn out all right.</td>
<td>.72</td>
</tr>
<tr>
<td>52. Came up with a couple of different solutions to the problem.</td>
<td>.71</td>
</tr>
<tr>
<td>26. I made a plan of action and followed it.</td>
<td>.69</td>
</tr>
<tr>
<td>48. Drew on my past experiences when I was in a similar position before.</td>
<td>.64</td>
</tr>
<tr>
<td>1. Just concentrated on what I had to do next – the next step.</td>
<td>.63</td>
</tr>
</tbody>
</table>

8. **Positive reappraisal** (variance explained = 1.7%; alpha = .86)

<table>
<thead>
<tr>
<th>Item</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>56. Changed something about myself.</td>
<td>.71</td>
</tr>
<tr>
<td>38. Rediscovered what is important in life.</td>
<td>.70</td>
</tr>
<tr>
<td>23. Changed or grew as a person in a good way.</td>
<td>.69</td>
</tr>
<tr>
<td>30. I came out of the experience better than when I went in.</td>
<td>.64</td>
</tr>
<tr>
<td>36. Found new faith.</td>
<td>.60</td>
</tr>
<tr>
<td>20. I was inspired to do something creative.</td>
<td>.57</td>
</tr>
<tr>
<td>60. I prayed.</td>
<td>.56</td>
</tr>
</tbody>
</table>
According to Folkman and Lazarus (1988), these eight subscales have been thought to reflect the two basic styles of coping and can be collapsed into two higher order factors: problem-focused and emotion-focused (for review, see Skinner, Edge, Altman, & Sherwood, 2003). Furthermore, as proposed by Folkman and Lazarus, it has been stated that the WCQ should be adjusted to fit the goals of a specific study (Lundqvist & Ahlstrom, 2006). Given the goals of the current study, the eight factors were collapsed prior to analyzing the hypotheses in order to represent one of the two underlying coping styles (for review, see Folkman & Lazarus, 1988). A similar strategy was used in Crockett and colleagues’ (2007) examination of the relations between college students’ stress and psychological functioning. For the current study, the following factors represent problem-focused coping: Confrontive, Seeking social support, Accepting responsibility, and Planful problem-solving. The following factors represent emotion-focused coping: Distancing, Self-controlling, Escape-Avoidance, and Positive reappraisal. For life stress, problem-focused coping explained 28% and emotion-focused coping explained 22% of the total variance in coping. For financial stress, problem-focused coping explained 45% of the total variance in coping and emotion-focused coping explained 42%. Table 3 provides Cronbach’s alphas for the final problem- and emotion-focused coping styles for life and financial stress.
Table 3.

*Final Loadings for Problem- and Emotion-focused Coping Styles; Separate Analyses for Life Stress and Financial Stress*

<table>
<thead>
<tr>
<th>Coping Style</th>
<th>Life</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem-focused coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confrontive</td>
<td>.79</td>
<td>.89</td>
</tr>
<tr>
<td>Seeking social support</td>
<td>.63</td>
<td>.78</td>
</tr>
<tr>
<td>Accepting responsibility</td>
<td>.63</td>
<td>.81</td>
</tr>
<tr>
<td>Planful problem-solving</td>
<td>.59</td>
<td>.78</td>
</tr>
<tr>
<td>Emotion-focused coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distancing</td>
<td>.75</td>
<td>.90</td>
</tr>
<tr>
<td>Self-controlling</td>
<td>.56</td>
<td>.76</td>
</tr>
<tr>
<td>Escape-Avoidance</td>
<td>.60</td>
<td>.84</td>
</tr>
<tr>
<td>Positive reappraisal</td>
<td>.47</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td>.56</td>
<td>.77</td>
</tr>
</tbody>
</table>

Construct validity for the WCQ has been established with measures of depression and anxiety such that depression was found to be positively related to the Positive Reappraisal Scale and negatively related to the Planful Problem-Solving Scale, anxiety was found to be positively related to the Seeking Social Support Scale (Vitaliano, Russo, Carr, Maiuro, & Becker, 1985). Test-retest reliability is typically not examined for the WCQ because it is in direct conflict with the interactional theory of stress (Folkman & Lazarus, 1988) meaning healthy individuals are expected to make adjustments in coping as time passes, making test-retest reliabilities meaningless (Rexrode, Petersen, & O’Toole, 2008).

**Mental health functioning**

The Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982) is a 53-item inventory designed to assess psychological distress. All items have a 5-point Likert-type
scale that shows degrees of psychological distress ranging from *not at all* to *extremely*. The BSI yields T-scores based on norms by gender for nine subscales measuring the primary dimensions of psychopathological symptoms; the nine subscales are somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Scores for depression and anxiety will be used in the proposed study. With respect to internal reliability, Cronbach’s alphas ranging from $\alpha = .75$ to $\alpha = .89$ were obtained in a study by Boulet and Boss (1991). For this sample, Cronbach’s alpha for depressive items was $\alpha = .88$ and $\alpha = .78$ for anxiety items. Test-retest reliability coefficients ranged from $r = .68$ to $r = .91$, according to Derogatis and Spencer (1982). In terms of validity of the BSI, concurrent validity has been demonstrated through correlations between subscales on the BSI and the Minnesota Multiphasic Personality Inventory (Boulet & Boss, 1991) and predictive validity has been established in a number of studies (see Derogatis, 1993).
CHAPTER FIVE

Results

Overview of data analytic strategy

In order to address hypotheses, analyses were performed using Statistical Package for the Social Sciences (SPSS). First, a descriptive analysis of demographic characteristics of study participants was computed to check for normality of the data. Second, study variables were checked for irregularities, missing data, and compliance with the assumptions for hierarchical regression analyses. To address Objectives 1, 2, and 5, a series of hierarchical regression analyses were conducted for each dependent variable (i.e., depression and anxiety) to evaluate the amount of variance in mental health functioning that could be explained by stress (life and financial), perception of control, and coping strategies. In hierarchical multiple regression, independent variables were entered into the analysis in a sequence of blocks, or groups that may contain one or more variables. In Blocks 1 and 2 of the regression equations, main effect terms were entered separately. Block 3 consisted of the 2-way interaction terms. To address Objectives 3 and 4, correlational analyses were conducted to investigate the relations among (a) coping strategies and perception of control and (b) perception of control and mental health functioning.

Preliminary Analyses

Based on correlation analyses, no demographic variables were significantly associated with any of the variables in the hypothesized model; thus, demographic factors were not used as covariates in subsequent analyses. Descriptive statistics for all study variables are presented in Table 4. These variables, in addition to demographic information,
were examined for missing values and assumptions of relevant multivariate analyses.

Examination of normal probability plots and scores for skewness and kurtosis revealed that the assumption of normality was not met by financial stress. Financial stress was significantly and positively skewed; however, it was retained because it was felt by the author that this type of nonnormal distribution was “typical” for an undergraduate sample.

Table 4.

*Descriptive Information of Measures*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Mean  (SD)</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Stress</td>
<td>13.18 (3.98)</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Financial Stress</td>
<td>0.00 (1.0)</td>
<td>-1</td>
<td>6</td>
</tr>
<tr>
<td>Coping with Life Stress Problem-focused</td>
<td>30.89 (10.09)</td>
<td>0</td>
<td>64</td>
</tr>
<tr>
<td>Emotion-focused</td>
<td>36.80 (11.92)</td>
<td>0</td>
<td>68</td>
</tr>
<tr>
<td>Coping with Financial Stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem-focused</td>
<td>22.42 (13.96)</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>Emotion-focused</td>
<td>27.07 (17.39)</td>
<td>0</td>
<td>84</td>
</tr>
<tr>
<td>Perception of control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Stress</td>
<td>39.81 (14.61)</td>
<td>0</td>
<td>83</td>
</tr>
<tr>
<td>Financial Stress</td>
<td>4.55 (1.86)</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Mental Health Functioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>4.63 (5.09)</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Anxiety</td>
<td>4.24 (4.07)</td>
<td>0</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: All scores are raw scores with the exception of the mean standardized score for financial stress.
Objective 1. To determine if stress predicts mental health functioning.

To examine the amount of variance in mental health functioning that was explained by stress, a series of hierarchical regressions was conducted. Separate models were conducted for each type of stress for each outcome variable. These models included the type of stress as the predictor variable (life, financial) and mental health functioning (anxiety, depressive symptoms) as the outcome variable.

With respect to life stress, higher scores on the CLSI predicted higher levels of depression ($b = .22, p < .001, R^2 = .03$) and anxiety ($b = .20, p < .001, R^2 = .04$). Concerning financial stress, higher scores on the FSQ predicted higher levels of depression ($b = .16, p < .01, R^2 = .02$) and anxiety ($b = .12, p < .05, R^2 = .02$). Overall, life and financial stress accounted for a statistically significant but very small proportion of variance in depression and anxiety.

Objective 2. To determine if coping style moderates the relation between life and financial stress and mental health functioning.

To examine if the relation between stress and mental health functioning varied as a function of coping style, a series of hierarchical regressions was conducted\(^1\). Separate models were conducted for each type of stress and coping style for each dependent variable. These eight models included type of stress in step 1 and coping style in step 2. The interaction term (coping style of interest X type of stress) was entered in step 3. To reduce multicollinearity, all independent variables were centered (Aiken & West, 1991). The interaction terms were

\(^1\) Regression models were also conducted with the separate eight coping strategies for life and financial stress and findings remained non-significant across all models.
created as products of the centered predictor variables. Significant interactions were probed and graphed using the statistical program, ModGraph (Jose, 2008).

Only one of the eight regression models predicting mental health functioning indicated significant moderating effects of participant coping (see Tables 5 and 6 for statistical information for all eight models). There was a significant interaction between emotion-focused coping and financial stress in predicting depression. As illustrated in Figure 1, when students used a high amount of emotion-focused coping, the relation between their reported level of financial stress and depressive symptoms was weaker (i.e., under conditions of high emotion-focused coping, depression was high regardless of level of financial stress) than was the relation for those students who used a low amount of emotion-focused coping (i.e., under conditions of low emotion-focused coping, depression was low when financial stress was high).
Table 5.

*Hierarchical Regression Analyses Testing the Association between Life Stress and Mental Health Functioning and the Moderating Influence of Coping Style.*

<table>
<thead>
<tr>
<th></th>
<th>Problem-Focused</th>
<th></th>
<th></th>
<th>Emotion-Focused</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
<td>ΔR²</td>
<td>FΔ</td>
<td>B</td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life stress</td>
<td>.22</td>
<td>.07</td>
<td>.18</td>
<td>.03</td>
<td>11.16***</td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>.09</td>
<td>.03</td>
<td>.18</td>
<td>.03</td>
<td>11.13***</td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life stress*Coping</td>
<td>.01</td>
<td>.01</td>
<td>.15</td>
<td>.00</td>
<td>.26</td>
<td></td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life stress</td>
<td>.20</td>
<td>.05</td>
<td>.20</td>
<td>.04</td>
<td>14.49***</td>
<td></td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>.11</td>
<td>.02</td>
<td>.27</td>
<td>.06</td>
<td>25.19***</td>
<td></td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life stress*Coping</td>
<td>.01</td>
<td>.01</td>
<td>.12</td>
<td>.00</td>
<td>.18</td>
<td></td>
</tr>
</tbody>
</table>

*** p < .001

Note: Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 4 independent analyses.
Table 6.

*Hierarchical Regression Analyses Testing the Association between Financial Stress and Mental Health Functioning and the Moderating Influence of Coping Style.*

<table>
<thead>
<tr>
<th></th>
<th>Problem-Focused</th>
<th></th>
<th>Emotion-Focused</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>β</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial stress</td>
<td>.74</td>
<td>.36</td>
<td>.11</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>.08</td>
<td>.02</td>
<td>.22</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial stress*Coping</td>
<td>.02</td>
<td>.02</td>
<td>.08</td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial stress</td>
<td>.62</td>
<td>.27</td>
<td>.12</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>.08</td>
<td>.02</td>
<td>.27</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial stress*Coping</td>
<td>.01</td>
<td>.02</td>
<td>.04</td>
</tr>
</tbody>
</table>

† p < .05, * p < .025, ** p < .01, *** p < .001
Note: Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 4 independent analyses.
Figure 1. Emotion-focused coping moderates the association between financial stress and depressive symptoms.

Objective 3. To investigate if coping strategies are related to perception of control.

Correlations were conducted to examine the relations between coping style and perception of control under conditions of life and financial stress. Contrary to the hypotheses, significant negative correlations were not indicated between emotion-focused coping and perception of control under conditions of life or financial stress ($r = .09$). In fact, a significant positive correlation ($r = .32, p < .001$) was indicated under conditions of life stress as opposed to the predicted negative correlation. However, as expected, significant positive correlations were found between problem-focused coping and perception of control under conditions of life stress ($r = .33, p < .001$) and financial stress ($r = .18, p < .001$).
Objective 4. To determine if perception of control of life and financial stressors is related to mental health functioning.

Separate correlations were conducted to examine the relations between perception of control and mental health functioning in regards to life and financial stress. Contrary to predictions, significant correlations were not indicated under conditions of life stress between perception of control and either anxiety ($r = .09$) or depression ($r = .05$). Under conditions of financial stress, however, significant negative correlations were indicated between perception of control of financial stressors and anxiety ($r = -.15$, $p < .01$) and perception of control of financial stressors and depression ($r = -.22$, $p < .01$).

Objective 5. To determine if perception of control and coping strategies interact to predict mental health outcomes.

A series of hierarchical regressions were conducted to examine if perception of control and coping strategies interacted to predict anxiety and depressive symptoms for college students. As seen in Table 7 and 8, none of the regression models predicting mental health functioning indicated significant interactions.
Table 7.

Hierarchical Regression Analyses Testing the Interaction between Perception of Control and Coping in the Prediction of Mental Health Under Conditions of Life Stress.

<table>
<thead>
<tr>
<th></th>
<th>Problem-Focused</th>
<th></th>
<th></th>
<th>Emotion-Focused</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>SE</td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
<td>$F\Delta$</td>
<td>$B$</td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of Control</td>
<td>.02</td>
<td>.02</td>
<td>.05</td>
<td>.00</td>
<td>.86</td>
<td>.02</td>
</tr>
<tr>
<td>Step 2:</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coping</td>
<td>.12</td>
<td>.03</td>
<td>.23</td>
<td>.05</td>
<td>16.69***</td>
<td>.14</td>
</tr>
<tr>
<td>Step 3:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of Control*Coping</td>
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*** $p < .001$

Note: Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 4 independent analyses.
Table 8.

Hierarchical Regression Analyses Testing the Interaction between Perception of Control and Coping in the Prediction of Mental Health Under Conditions of Financial Stress.

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<tr>
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** p < .01, *** p < .001

Note: Separate hierarchical regressions were conducted for each of the interaction terms for each of the DVs, for a total of 4 independent analyses.
CHAPTER SIX

Discussion

The overall purpose of the study was to contribute to the understanding of strategies for coping with financial stress because relatively few investigations of coping effectiveness have been conducted and the degree to which college students must cope with financial stress is increasing during the current economic crisis. At its conception, this study was the first to investigate the effectiveness of various coping styles for college students experiencing financial stress. The specific goals of the study were to examine the relation between life and financial stress and mental health functioning of college students. In addition, factors that potentially exacerbated or diminished the relation between stress and poor mental health functioning were investigated; those factors included perception of control and the degree to which individuals used emotion-focused and problem-focused coping strategies. Further, by using Lazarus and Folkman’s (1984) interactional model of stress as a guide, an important assumption of the current study’s model was that coping effectiveness was dependent on the “match” between coping strategies and individual characteristics such as the appraisal of the stressor (e.g., controllability). Specifically, the use of problem-focused coping was hypothesized to be most adaptive in situations appraised controllable and less adaptive in those perceived as uncontrollable; the reverse was expected for emotion-focused coping. In summary, I had five objectives for the current study, and I discuss each of these objectives below, followed by the strengths and limitations of this research, ending with directions for future research. See Figures 2 and 3 for a summation of the objectives supported and not supported in the current study.
Figure 2. Model of supported and unsupported relations between college students’ life stress, perception of control, coping strategies, and mental health outcomes.

Note: Solid black lines indicate supported relations; dashed lines no support found for the hypothesized relation; red lines indicate significant relations contrary to predictions.
Objective 1: To determine if stress predicts mental health functioning.

As expected, when students experience high levels of life and financial stress they are likely to report high levels of depression and anxiety. This finding that stress predicts mental health functioning for college students has been supported by a number of other studies (Dyson & Renk, 2006; Eisenberg et al., 2007; Higgins & Endler, 1995; Pancer, Hunsberger,
Pratt, & Alisat, 2000; Roberts et al., 1999) and is not surprising given that populations in a developmental transition (i.e., college students) are thought to be especially vulnerable to the effects of stressful processes (Cohen, Burt, & Bjorck, 1987). These results provide support for the implementation (or continuation) of stress management programs for college students. Interventions focused on reducing stress and improving overall mental health in college students have been found to significantly decrease symptoms of anxiety and depression (Deckro et al., 2002; Dziegielewski, Roest-Marti, & Turnage, 2004; Shapiro, Schwartz, & Bonner, 1998). Successful interventions for students include relaxation techniques, cognitive-behavioral strategies, social support, and psychoeducation.

**Objective 2: To determine if coping style moderates the relation between life and financial stress and mental health functioning.**

Consistent with prior research described previously (Beasley et al., 2003; Cohen et al., 2008; Crockett et al., 2007; Higgins & Endler, 1995; Pizzolato, 2004), I predicted that a problem-focused coping style was a more adaptive form of coping with various life stressors. More specifically, I hypothesized that when a student coped with stress using a greater amount of emotion-focused strategies, such as exercising, and a lower amount of problem-focused strategies, such as making a plan of action, there would be a greater likelihood that this student would experience symptoms of depression and anxiety. Contrary to predictions, however, neither depression nor anxiety was significantly predicted by the interaction of coping style and life stress. In other words, based on this study, a student’s decision to use problem-focused versus emotion-focused coping when experiencing life stress may have little effect on mental health outcomes. The current study did not specifically address this
question, but a potential implication could be that when experiencing life stress, the type of coping strategy used is less important than simply doing something (versus nothing) in order to relieve the stress.

Although general patterns of effective coping when exposed to stress have been identified in some prior studies (i.e., problem-focused coping linked to better adjustment; emotion-focused coping linked to poorer adjustment) (Beasley et al., 2003; Ben-Zur, 2002; Cohen, 2002; Coyne & Racioppo, 2000; Kolenc, Hartley, & Murdock, 1990; Stewart et al., 1997), there are also a number of studies that present findings counter to this pattern. Further, even though it is assumed that problem-focused and emotion-focused coping strategies differ in effectiveness, studies have indicated that their usefulness may depend on other factors not examined in this investigation (e.g., Holahan & Moos, 1987; Mattlin, Wethington, & Kessler, 1990). For example, it has been found that coping is influenced by personality dispositions such as optimism (Carver & Scheier, 1999) and social resources such as family support (Holahan & Moos, 1987). Future studies aimed at analyzing the association between coping and psychological adjustment need to give more weight to the influence of these contextual factors. Appreciating this link between background factors and coping is also likely to help clinicians better identify students who would benefit most from receiving help to cope with the psychological aspects of college (i.e., a coping skills program).

Consistent with research conducted by Wadsworth and colleagues (Wadsworth & Berger, 2006; Wadsworth & Compas, 2002; Wadsworth et al., 2005) I predicted that an emotion-focused coping style would be a more adaptive form of coping with financial stress. It was hypothesized that under conditions of high problem-focused coping and low emotion-
focused coping, a significant positive link would be indicated between financial stress and mental health outcomes. The results from the regression analyses did show that the interaction of emotion-focused coping and financial stress predicted depression but not anxiety. After probing the significant interaction, however, it was determined that findings were in the opposite direction of predictions. In other words, college students that reported using a high level of emotion-focused coping reported more depressive symptoms at all levels of financial stress (high, medium, and low).

Given that relations were not supported under conditions of life stress and partially supported under conditions of financial stress, it is possible there are differential patterns in coping with life versus financial stress. More specifically, based on these findings, could emotion-focused financial coping be qualitatively different from problem-focused financial coping? Unlike problem-focused coping, emotion-focused coping was associated with increased depression in the present study across all levels of financial stress. These differences may suggest that when coping specifically with financial stress, one should not rely as heavily on emotion-focused strategies but instead use a more problem-focused approach. Therefore, perhaps emotion-focused coping is better viewed as a general approach to dealing with financial issues and not a coping strategy per se. These findings are consistent with a number of studies that have found emotion-focused coping to be less useful in financially stressful situations (Aldwin & Revenson, 1987; Caplan & Schooler, 2007; Weiss, Goebel, Page, Wilson, & Ward, 1999). In general, additional research needs to be conducted in this area. Specifically, future studies should attempt to identify coping strategies and other
variables that mediate or moderate the link between financial stress and adjustment in order to understand this relation more fully.

**Objective 3. To investigate if coping strategies are related to perception of control.**

Theoretically, appraisals of control call for greater proportions of active, problem-focused forms of coping, and appraisals of lack of control call for emotion-focused forms of coping (see Compas et al., 1988). Thus, I predicted a significant positive correlation between problem-focused coping and perception of control under conditions of life and financial stress and a negative correlation between emotion-focused coping and perception of control under conditions of life and financial stress. As expected, a greater use of problem-focused coping was associated with higher levels of perceived control under conditions of life and financial stress. This finding suggests that college students use problem-focused coping strategies in response to life and financial stressors they deem controllable. Contrary to predictions, however, a greater use of emotion-focused coping was associated with higher levels of perceived control under conditions of life stress and no relation was found between emotion-focused coping and perception of control under conditions of financial stress.

Similar findings were reflected in the study conducted by Caplan and Schooler (2007) who also failed to find a relation between perceived control and emotion-focused financial coping.

In general, under conditions of life stress, perhaps appraisals of control warrant use of both problem- and emotion-focused forms of coping. Research has confirmed this general hypothesis that perceived control is associated with various coping strategies (Anderson 1977; Conway & Terry, 1992; Forsythe & Compas, 1987; Holahan & Moos, 1987; Vitaliano, DeWolfe, Maiuro, Russo, & Katon, 1990; Zakowski, Hall, Klein, & Baum, 2001). Perhaps
this is the case because of the nature of life stress. Life stress is often described as transient and it is possible that it is not as important to match the coping strategy with the student’s perception of control, as it is to make sure that the coping strategy selected is successful in producing the desired effect. For example, when a student registers for classes (a stressful process students report as controllable) it is possible that praying and meditating throughout the entire process is sufficient to ward off any negative consequences on the student’s psychological well-being.

In their examination of the *goodness of fit* hypothesis, Forsythe and Compas (1987) made a similar argument. Although the authors concluded that psychological symptoms vary as a function of the match between perception of control and life events, this finding occurred only in relation to a college student’s *major* life event and was not supported with their most distressing *daily* event. Investigators suggested that the *goodness of fit* hypothesis may only apply to daily events when they occur cumulatively across a number of stressors.

With regards to financial stress, however, a significant relation was found between problem-focused coping and perception of control in the present study only under conditions of problem-focused forms of coping. This finding is consistent with previous findings (Caplan & Schooler, 2007; Christensen et al., 1995; Park, Folkman, & Bostrom, 2001; Terry & Hynes, 1998) and gives further support to the *goodness of fit* hypothesis that states the probability of choosing problem-focused coping strategies is higher when the relevant problematic situations are appraised as more controllable (Folkman, 1984). For example, a student who reports having complete control over his/her financial situation is more likely to
use a problem-focused coping strategy such as doubling his/her efforts to make things work when facing a financial problem such as making a student loan payment.

In summary, under conditions of life stress, college students’ perception of control is associated with their use of various coping strategies. The transient nature of life stress, as well as the cumulative toll it takes on a student, likely impacts the importance one places on their level of perceived control when choosing a coping strategy. Under conditions of financial stress, however, it seems more important to use problem-focused coping specifically when levels of perceived control are high.

**Objective 4. To determine if perception of control of life and financial stressors is related to mental health functioning.**

Based on the bulk of prior research, I hypothesized that there would be significant negative correlations between students’ perception of control and their mental health functioning. The results did show that higher levels of perceived control of financial stress were associated with lower levels of depression and anxiety. However, contrary to prediction, students’ levels of perceived control over life stress were not significantly associated with levels of depression or anxiety. Past studies of perceived control have reported a similar pattern (Folkman, 1984; Forsythe & Compas, 1987). A careful review of these studies indicates mixed findings. Specifically, investigators have suggested that a sense of control can be associated with a heightened level of distress (Thompson, Cheek, & Graham, 1988; Wortman, Sheedy, Gluhoski, & Kessler, 1992) as well as a decreased level of distress (Lachman & Weaver, 1998; Wadsworth & Compas, 2002).
Similar to a previous point, the sometimes-temporary nature of life stress may cause the relation between perception of control and mental health outcomes to appear less relevant in comparison with the link between coping strategy and psychological adjustment. When dealing with a transient stressor a student may only be concerned with picking a coping strategy that is effective in making the stressor decrease or go away and as a result, feeling better about the situation. As a consequence, less consideration may be given to controllability of that stressor.

Conversely, it seems that perception of control over financial stress is a particularly important predictor of mental health. To my knowledge, this is the first examination of the link between controllability of financial stress and mental health functioning of college students. Other studies, however, with an older aged sample have also found perception of control to be related to outcomes under conditions of financial stress. Lachman and Weaver (1998), for example, demonstrated that those in the lowest income group who possessed a high sense of control were very similar to higher income groups with respect to overall health and well-being. Authors concluded that sense of control served as a buffer for the negative consequences of low social class in regard to well-being.

**Objective 5. To determine if perception of control and coping strategies interact to predict mental health outcomes.**

The fifth and final objective of the current study was to determine if the interaction of students’ perception of control and coping strategies was predictive of mental health functioning as suggested by the interactional model of stress (Lazarus & Folkman, 1984). More specifically, I hypothesized that under conditions of life stress, higher levels of
emotion-focused forms of coping would exacerbate the link between low levels of perceived control and depression and anxiety. In addition, higher levels of problem-focused forms of coping would weaken the link between low levels of perceived control and depression and anxiety. Contrary to prediction, however, the interaction of perception of control and coping strategies did not predict mental health outcomes for students.

In regards to financial stress it was predicted that a higher proportion of emotion-focused forms of coping would weaken the link between low levels of perceived control and depression and anxiety. Further, a higher proportion of problem-focused forms of coping would exacerbate the link between low levels of perceived control and depression and anxiety. Similar to above, the interaction of perception of control and coping strategies did not predict mental health outcomes for students.

Based on findings relative to financial stress, these data do not support presumptions made by the goodness-of-fit hypothesis. More specifically, it was expected that people who chose coping strategies that fit the appraised controllability of a task would have better outcomes than people who did not (Folkman & Moskowitz, 2004). Consistent with findings of other studies (Compas, Worsham, Ey, & Howell, 1996; Roberts, 1995), however, mental health functioning of students in this sample did not differ according to the degree of fit between students’ perceived control and their choice of coping strategy. The current study suggests that although students may have a tendency to match their coping strategies with their levels of perceived control, mismatches do not necessarily lead to poorer mental health adjustment under conditions of financial stress.
It is important to mention that research has indicated (Folkman & Moskowitz, 2004; Pritchard, Wilson, & Yamnitz, 2007) that the adaptive value of any coping strategy may vary with certain situational variables such as perceived control, predictability, and to the extent to which the event is threatening. Perhaps the current study failed to produce significant findings for Objective 5 because an unobserved situational characteristic that may have influenced this association, was not taken into account. For example, two college students might have indicated the event “applying for a job” was very stressful but the first student interpreted this stressor as a challenge and thus used a more problem-focused coping strategy to combat his stress, but the second student viewed the stressor as a threat and thus decided to use an emotion-focused coping strategy to feel better. Both students might have been able to successfully combat the stress of applying for a job; however, they did it in different ways and for different reasons.

Summary

Findings from the current study indicate that students experiencing life and financial stress are also experiencing symptoms of depression and anxiety. This is not a new finding; however, it should remind readers of the importance of identifying these students and offering them help to perhaps resolve or alleviate present symptoms. In particular, it may be especially important to offer financial literacy programs to students since college may be their first experience at managing money. While most literacy initiatives serve in a preventative mode, some offer treatment programs for those with financial problems (Hogarth, 2002). College and university campus counselors could begin by offering basic financial education to interested students and then provide follow-up counseling sessions.
customized to the individual needs of the student. Professionals should make sure that while providing basic financial information to students they are also educating them about the potential impact of financial stress on mental health.

Generally speaking, the results of this study indicated differential patterns of relations among coping, perceived control, and mental health functioning for life stress and financial stress. First, coping strategies did not differ in utility under conditions of life stress as they did in regard to financial stress. Specifically, students who used a high amount of emotion-focused coping strategies for dealing with financial stress experienced more depressive symptoms than those who used lower amounts of emotion-focused coping. Second, under conditions of life stress, perceived control necessitated the use of either type of coping whereas under conditions of financial stress, appraisals of control only warranted the use of problem-focused coping. Finally, the proposed models of life stress and financial stress operated differently in terms of perception of control and mental health outcomes. Specifically, an association was found between students’ perceived control and reported depressive and anxiety symptoms under conditions of financial stress; however, no significant relations were indicated between these variables under conditions of life stress.

Taken together, these findings suggest that life and financial stress are possibly influenced by a different set of psychological mechanisms, and therefore may be qualitatively different from one another. In fact, post hoc exploratory analyses of the unique contributions of life stress and financial stress to mental health functioning found that life stress was a stronger predictor of mental health outcomes in comparison with financial stress.
Specifically, life stress \((b = .35, .35)\) was a stronger predictor than financial stress \((b = .11, .08)\) of depression and anxiety, respectively.

**Limitations of Study**

Certain limitations should be kept in mind when interpreting the results of this study. One potential limitation is that by collapsing coping strategies into two general categories of coping, several problems could arise. First, a single coping strategy may be directed toward both problem- and emotion-focused goals simultaneously (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001). In other words, any coping strategy is likely to serve many functions. For example, walking away from an argument may serve the emotion-focused goal of calming oneself down and the problem-focused goal of taking time to produce alternative solutions to the conflict. Second, collapsing coping strategies into the two dimensions of problem- and emotion-focused coping could have masked important differences within categories of coping types. In order to directly compare specific strategies or find which strategies are associated with better adjustment, one would need a detailed breakdown of the broader dimensions of coping. Perhaps the broader dimensions of coping (i.e., problem- and emotion-focused) are more useful in helping investigators conceptualize and think about coping efforts (Folkman & Moskowitz, 2004) while a detailed breakdown of strategies is more appropriate when empirically comparing coping styles and their effectiveness.

There are limitations worth noting that relate to the design, measurement of constructs, and range of data from the present study. Given the cross-sectional design of this study, findings need to be interpreted with caution. This type of design prohibits any causal
inferences about coping effectiveness in reducing the amount of depressive and anxiety symptoms. Prospective studies are needed in which initial levels of depressive and anxiety symptoms are controlled and coping is used to account for changes in symptoms or competence over time (see Eisenberg et al., 2007 for example). Secondly, the measure of life stress used in the present study was broad in scope and inclusive of many types of stressors. By joining these various types of stressors into one composite score, important differences within categories of stress could have been overlooked. Additional significant findings pertaining to life stress may have been indicated had the life stress measure been divided into different categories of life stress (e.g., academic versus personal stressors).

Third, the measure of financial stress provided a low internal consistency of controllability for the present study (.54). However, “even relatively low (e.g., .50) levels of criterion reliability do not seriously attenuate validity coefficients” (Schmitt, 1996, p. 350). In fact, in some cases, measures with low levels of alpha may still be quite useful (Yu, 2001).

Fourth, even though the distribution of financial debt and stress was expected given the sample, it is still considered a limitation of the current study because of its restriction of range. Future investigators need to administer the FSQ to a wider range of ages in hopes of capturing more variability in debt. Perhaps including a larger number of upperclassmen and graduate students would suffice.

In addition, limitations exist that pertain to characteristics of the sample. First, it is important to note that the sample was drawn from a single university. This university has certain characteristics (such as being a large, research-oriented institution) that are not representative of colleges and universities in general, thus limiting the generalizability of the
present findings. The issues investigated in this study, especially financial debt and stress related to that debt, may be quite different among students enrolled in community colleges, private educational institutions, or online universities. One reason for this difference is that students from community colleges and online universities are older; a survey found that the average age of community college students is 29 years, and over 15% of all community college students are over the age of 40 (Sullivan, 2000). According to the National Profile website, the average age of students at the University of Phoenix, the largest online school (Burnsed, 2010), is 36 years. A wider age range may provide a wider range in study variables such as financial and life stress. Related to this point, a second limitation in generalizability of the current study is the homogeneity of the current sample (mainly Caucasian college students). As a consequence, results from the present study may not generalize to institutions of higher education with student populations that include larger proportions of nonmajority students (e.g., Historically Black Colleges and Universities).

**Future Directions**

The different mechanisms by which life and financial stress operated in the current investigation should be further addressed in future studies. Meaningful implications would likely result from determining the exact differences between life and financial stress. In other words, are these two types of stress different and if so, are there better ways of coping with them given a certain situation? Such implications include changes in how stress is studied. More specifically, it would be important to separate these two types of stress prior to defining, measuring, and/or interpreting variables.
There are several recommendations for future studies with respect to research design and measurement of constructs. First, since coping is multidimensional, future studies need to consider all of the meaningful dimensions that characterize coping in young adulthood. Conceptualization of coping impacts every aspect of a study, especially its measurement. The large number of distinct measures of coping has interfered with and added confusion to the interpretation, integration, and synthesis of findings across studies (Compas et al., 2001). To better make comparisons across studies, future studies would benefit from investigators using similar measures of coping with different populations exposed to differing types of stress.

Second, given that life stress is broad in scope, future studies should consider examination of separate categories of stress. For example, the current study’s life stress composite could have been broken down into academic, intrapersonal, and interpersonal stressors. By distinguishing between these categories of life stress in future studies, important differences within life stress are likely to be identified.

Third, given that coping with a stressful event is a process, future studies of coping should consider a longitudinal design. This type of approach is necessary for examining the transactional approach to coping and changes in coping over time. Fourth, the present study is based on self-assessment of all variables. Future research should consider other methods of assessment such as collecting bank statements in order to obtain financial information (as opposed to self-report) to gain a more accurate and perhaps comprehensive picture of the links between financial stress, coping, perceived control, and mental health outcomes for college students. Lastly, this research advances knowledge of student financial stress using data from the Financial Stress Questionnaire, created for this study. At the conception of this
study, no other measures of financial stress in the college population existed that took into account variables such as credit card debt and perception of stress related to this debt. Future studies investigating financial stress of college students, and these variables specifically, may want to consider using this questionnaire.

In closing, results of this study have useful implications for college administrators, student affairs personnel, and counseling center professionals, even with the previously mentioned limitations in mind. The results of this study suggest that students who are reporting life and financial stress may also experience symptoms of depression and anxiety. Given this finding, counseling centers on college campuses need to be cognizant of students’ levels of stress and prepared to offer treatments effective at reducing symptoms of poor mental health. Because financial concerns are perhaps the least effectively dealt with type of stress on campus (Murphy & Archer, 1996), implementation of a specific curriculum pertaining to debt management may especially benefit students. Such a curriculum is likely to help students cope with the psychological aspects of financing college and feeling as if they will never have enough money. This might be readily translated to multiple campuses and thus reach a large proportion of the young adult population.
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APPENDICES
Appendix A

Instructor script

Instructors will say:

A fellow graduate student (or if a faculty member is administering, just a graduate student) is currently working on her dissertation and is in need of help. She is investigating life and financial stress and coping in the undergraduate population here at NCSU. She is recruiting students who are willing to go online and spend about an hour responding to questionnaires. These questionnaires are also available to PSY 200 students online; however, it is very important to also hear from the upper level students in our more advanced Psychology classes…. which is why she has asked me (and you) for help.

Your participation is completely voluntary and your responses are anonymous. I will award you X amount of extra credit points should you choose to go online and participate. In order to receive extra credit points you must print off the confirmation page at the conclusion of the survey to verify your participation.

If you choose not to participate, understand there will be no penalty. If you have additional questions, the graduate student’s email address can be found on the consent form.
Appendix B

College Life Stress Inventory

In this survey, your task is to indicate which of the following events you have experienced in the most recent past or current semester by placing a check mark in the corresponding blank. Next, if you have experienced an event, rate how stressful that event was to you on the following scale:

0 = not applicable/not at all stressful; 1 = a little stressful; 2 = somewhat stressful; 3 = quite stressful; 4 = very stressful

Finally, in the third column, rate how much control you felt you had over this situation on the following scale:

0 = no control; 1 = a little control; 2 = some control; 3 = a lot of control; 4 = complete control

<table>
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<th>How much control? (0 through 4)</th>
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<td>Dealing with a roommate</td>
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<td>Having a boy/girlfriend cheat on you</td>
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<td>Writing a major term paper</td>
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<td>Oversleeping for an exam</td>
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<td>Being a victim of violence</td>
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<td>A difficult class that you love</td>
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<td>Drunk driving</td>
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<td>Declaring a major</td>
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<td>Getting straight A’s</td>
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<td>Registration</td>
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<td>Getting sick</td>
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<td>Fraternity/sorority rush</td>
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<td>Smoking marijuana</td>
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<td>Lack of sleep</td>
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<td>Two exams in one day</td>
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<td>Housing hassles</td>
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<td>Dealing with parents</td>
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<td>Depression in your best friend</td>
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<td>A class you hate</td>
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<td>Cheating on your boy/girlfriend</td>
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<td>Confrontations with professors</td>
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<td>Finals week</td>
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<td>Starting a new semester</td>
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<td>Falling asleep in class</td>
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<td>Peer pressure</td>
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<td>Applying for a job</td>
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<td>Concerns about getting pregnant</td>
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Financial stress questionnaire

Please answer the following questions by either filling in the appropriate information or checking the appropriate response.

1. Age in years _________

2. Gender _________

3. Marital status: check appropriate blank below
   _______ Single
   _______ Married
   _______ Separated or divorced
   _______ unmarried but living together

4. Employment status: check appropriate blank below
   _______ Employed part-time
   _______ Employed full-time
   _______ Self-employed
   _______ Unemployed

5. Year in school (based on credit hours passed): check appropriate blank below
   _______ Freshman
   _______ Sophomore
   _______ Junior
   _______ Senior
   _______ Nontraditional/other

6. Do you pay your own tuition? Circle: yes / no
   If no, who does?
   ____________________________________________________________________

7. What are your sources of income? Check all that apply.
   _______ student loans
   _______ job income
   _______ work study
   _______ receive money from family members
   _______ scholarships/grants
   _______ Other

8. How much money do you have available to pay your living expenses each month?
   Approximately how much money do you receive from each source each month?
   student loans $ _________________
job income $_________________
work study $_________________
money from family members $_________________
scholarships/grants $_________________
Other $_________________

TOTAL $_____________

9. Do you have at least one credit card in your own name? Circle yes / no

If yes, how old were you when you received the first credit card in your own name?

10. Beside each type of credit card that you have in your own name, write a number corresponding to how many of those cards you own. For example, if I have 3 gasoline cards in my name, I will write a 3 in the blank beside gasoline.

______ bank credit card (this is NOT a debit card)
______ store credit card
______ gasoline charge card
______ other

11. On average, what is the total amount of money you pay each month on credit card bills (including bank credit cards, store credit/charge cards, gasoline charge cards, and others)?

$_________________

12. Right now, what is the approximate total amount you owe on all your credit cards, after your most recent payments?

$_________________

13. How many months (if any) have you missed paying the required payment on at least one credit card in the last six months?

$_________________

14. What is the total amount of other debt (not including credit cards) you currently owe? Approximate monetary value beside each of the following, if you use the “other” category specify what type of debt you are referring to.

student loans $_________________
car/truck loans $_________________
cash loans $_________________
mortgages $_________________
non-credit/charge card debt $_________________
other $_________________
15. Looking back over all expenses (tuition, credit cards, student loans, car payments, mortgages, etc.), which expense causes you the most stress or worry?

__________________________________

Only check one response for each question below.

1. Overall, how often do you worry about the total amount you owe in overall debt?
   ○ never/not applicable
   ○ rarely
   ○ sometimes
   ○ often
   ○ constantly

2. How much stress does the total debt you are carrying cause you?
   ○ no stress at all/not applicable
   ○ a little stress
   ○ some stress
   ○ a lot of stress
   ○ severe stress

3. How concerned are you that you will never be able to pay off these debts?
   ○ not at all concerned/not applicable
   ○ mildly concerned
   ○ somewhat concerned
   ○ quite concerned
   ○ very concerned

When you experience stress related to your finances (credit card debt, student loans, tuition costs):

- How often do you think you can do something to change this situation? ____
  ○ 0 = I never think I can change this situation.
  ○ 1 = I rarely think I can change the situation.
  ○ 2 = I sometimes think I can change this situation.
  ○ 3 = I often think I can change this situation.
  ○ 4 = I constantly think I can change this situation.

- How much control do you feel you have over this situation? ____
  ○ 0 = no control
  ○ 1 = a little control
  ○ 2 = some control
  ○ 3 = a lot of control
  ○ 4 = complete control