LEISURE ACTIVITY AND COPING WITH THE STRESS OF UNIVERSITY LIFE

by

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(Under the Direction of Douglas A. Kleiber)

ABSTRACT

Students within a university setting are experiencing life transitions that may be difficult to manage. The purpose of this investigation was to examine the relationship between leisure, time pressure and managing stress in undergraduate and graduate students at a public southeastern university. The main findings indicate that perceived stress and time pressure are associated; that leisure activity is used to manage stress but not necessarily reduce it; that higher stress is associated with a greater propensity to utilize mood enhancing leisure activities; and that upperclassman and graduate students are more likely to cope by seeking companionship through their leisure than freshman and sophomores. These findings make a case for further research on why and how these factors are associated and suggest that leisure time and activity are relevant variables for students and others concerned with managing the stress of university life.

INDEX WORDS: stress, time pressure, leisure, emerging adults, well-being

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TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS iv

LIST OF TABLES vii

LIST OF FIGURES ix

CHAPTER

1 INTRODUCTION 1

Purpose Statement 4

Research Questions 4

2 LITERATURE REVIEW 5

Emerging Adulthood and Implications for Successful Adjustment and Development 8

Health Impacts of Leisure 9

The Complexities of Emerging Adulthood 11

Current Institutional Intervention Programs 16

3 METHODOLOGY AND METHODS 21

Participants 21

Budget and Timeline for Completion 23

Data Collection Procedures 24

Measurements and Data Analysis 25

Potential Research Implications 27

Dissemination of Results 27

Delimitations 28

Limitations 28

4 RESULTS 29

Sample Characteristics 29

Research Questions 30

5 DISCUSSION 47

Summary 47

Discussion of Findings 47

Limitations 54

Implications for Future Research 55

REFERENCES 57

APPENDICES

A Coping Strategies of University Students Questionnaire 61

LIST OF TABLES

Page

Table 1: Research Concepts....28

Table 2: Crosstabs: Year in School and Age....29

Table 3: Crosstabs: College and Year in school....30

Table 4: Descriptive Statistics: Total Perceived Stress Score....31

Table 5: Grouped Perceived Stress Frequencies....31

Table 6: Descriptive Statistics: Time Pressure....32

Table 7: Grouped Time Pressure Frequencies....33

Table 8: ANOVA of Perceived Stress....33

Table 9: Sidak: Post Hoc Comparison of Perceived Stress between Time Pressure Groups....34

Table 10: ANOVA of Perceived Stress Levels....36

Table 11: Post Hoc Comparison of Perceived Stress between Leisure Time Discrepancy Groups....36

Table 12: Relaxation Activities Frequencies....38

Table 13: Grouped Perceived Stress and Relaxing Activity....39

Table 14: ANOVA of Perceived Stress Level and Leisure Coping Strategy....42

Table 15: Sidak: Post Hoc Comparison of Perceived Stress Level and Mood Enhancement....43

Table 16: ANOVA of Gender and Perceived Stress Level....43

Table 17: ANOVA of Gender and Time Pressure....43

Table 18: ANOVA: Gender and Leisure Coping Strategies....44

Table 19: ANOVA of Year in school and Perceived Stress 44

Table 20: ANOVA of Year in school and Time Pressure 44

Table 21: ANOVA of Year in School and Leisure Coping Strategies 45

Table 22: ANOVA of College and Perceived Stress 46

Table 23: ANOVA of College and Time Pressure 46

Table 24: ANOVA of College and Leisure Coping Strategies 46

LIST OF FIGURES

Page

Figure 1: Bar Graph: Total Perceived Stress Scores....31

Figure 2: Distribution of Time Pressure Scores....32

Figure 3: Leisure Time Discrepancy Scores....35

Figure 4: Total Leisure Companionship Scores....40

Figure 5: Total Palliative Coping Scores....41

Figure 6: Total Mood Enhancement Scores....41

CHAPTER 1

INTRODUCTION

In a recent opinion article in the *New York Times,* Tim Kreider addressed the societal phenomenon he deemed the "Busy Trap" (Kreider, 2012). Kreider painted the picture of a society that claims to be perpetually too busy to commit to any activity that has not been pre-planned or pre-scheduled. While Kreider's cure for busyness is relaxation and spontaneity, the issue of busyness remains. What is the root of this busyness, when did we become too busy, and how is this busyness impacting us?

As we transition through developmental life stages, responsibilities and commitments increase. With increased responsibility comes increased stress and anxiety, which can contribute to numerous negative consequences or positive benefits depending on an individual's ability to cope. One's ability to negotiate and juggle increased responsibility and stress may lead to a healthier and happier view of life and self. The stage of life that is the focus of this study is early adulthood, the period when the "busy trap" (Kreider, 2012) may first begin to be constructed.

For the purpose of this investigation, early adulthood includes a period called "emerging adulthood" that is nevertheless commonly distinguished from it as a preliminary, provisional period of adult development (Arnett, 2000). Emerging adults, those who have typically finished secondary school but have not entered the workforce full time, face challenges such as leaving the comforts of their home for higher education, making semi-independent choices, building a new social support system, and seeking employment to pay for living expenses while attempting to be academically successful in higher education (Ackerman & Gross, 2003; Arnett, 2000;

Newton, Kim, & Newton, 2006; Nonis, Hudson, Logan, & Ford,1998). These factors create a recipe for increased stress leading to an increase in negative stress outcomes. Emerging adults currently seem to be losing the battle against succumbing to negative stress outcomes.

Emerging adults have the highest depression rate (Kuwabara, Voorhees, Gollan, & Alexander, 2007), the highest rate of substance abuse (Arnett, 2005), and are more likely to be overweight or obese (Nelson, Story, Larson, Neumark-Sztainer & Lytle, 2008) in comparison to other developmental periods. Specifically examining undergraduate students transitioning into college, physical activity declines, eating habits change, alcohol consumption increases, and experimentation with drugs and sex increases (Newton et al., 2006). Unhealthy and risky habits, such as the aforementioned, are negative coping strategies that undergraduates may use in order to cope with their feelings of stress and anxiety (Nguyen-Michel, Unger, Hamilton, & Spruijt-Metz, 2006). Building a healthy coping lifestyle foundation is essential to undergraduate immediate and long-term health (Newton et al., 2006).

Colleges and universities offer programs for incoming freshmen in an attempt to aid in the transition from high school to college, but these resources may not be accessible or desirable for many students (Ratanasiripong, Sverduk, Hayashino, & Prince, 2010). Some researchers have developed programs such as an 8-week behavior change program (Newton et al., 2006), biofeedback programs for learning to control physiological reactions to stress and anxiety (Ratanasiripong et al., 2010), and a semester long support group program with themed weekly meetings (Pancer, Pratt, Hunsberger, & Alisat, 2004). Most research, however, is concerned with pin pointing specific relationships between stress outcomes and stressors and learning specific strategies undergraduates use to combat negative stress outcomes (Ciarrochi & Scott, 2006; Misra & McKean, 2000; Newton et al., 2006; Ngyuyen-Michel et al., 2006; Nonis et al.,

1998; Rizzolo, Zipp, Stiskal, & Simpkins, 2009; Staats, Cosmar, & Kaffenberger, 2007; Welle & Graf, 2011).

Several studies have highlighted the role of time management, perceived time pressure, or perceived control over time as contributors to perceived stress and related outcomes (Ackerman et al., 2003; Hilbrecht, Zuzanek, & Mannell, 2008; Misra et al., 2000; Nonis et al., 1998). Comparable literature can be found involving work/life balance in adults (e.g. Christiansen & Matuska, 2006; Hilbrecht, Shaw, Johnson, & Andrey, 2008; Horna, 1989). Results from these studies suggest that as one balances aspects of his or her life, one should be able to manage stress and its consequences more effectively. However, living a balanced life is easier said than done.

While no consensus has been reached defining leisure (Chick, 2010) scholars agree that leisure provides opportunities to increase and maintain physical (LaMonte & Chow, 2010), cognitive (Castelli, 2010), emotional (Wiersma & Parry, 2010), and social well-being (Gill & Bedini, 2010; Keller, Fleury, & Rogers, 2010) even into later life (Dupuis, 2008). Leisure activity involvement is an important aspect of aging successfully, and developing leisure skills at a young age could provide opportunities to combat leisure inequalities in later life. Utilizing leisure, as a means to cope with stress, may be useful to college students, while also building a foundation of leisure skills.

Although using leisure for coping during college years has been understudied, some have attempted to contribute to the research in this area. Iwasaki and Mannell (2000) have assessed the extent to which undergraduate students use leisure as a means to cope as well as if there were specific coping strategies that aligned with specific stressors. Iwasaki and Mannell found leisure coping strategies to be situational in that individuals may choose a specific leisure activity due to

the stress they need to cope with, or they may find that leisure helps them cope in general. Expanding the research in this area could highlight leisure coping patterns of college students that can be utilized to better meet the needs of transitioning students and aid them in developing foundational skills in coping that could benefit them throughout their lives.

Purpose Statement

Despite research interest in work/life balance with employed adults, the use of leisure in coping with stress in college students is understudied. The purpose of this survey research is to examine the relationship between leisure, time pressure and managing stress in undergraduate and graduate students at a public southeastern university.

Research Questions

1. How much stress do university students feel?
2. To what extent is perceived time pressure and perceived leisure time discrepancy associated with perceived stress in university students?
3. To what extent, and in what ways, are leisure activities intentionally used in coping with the stress experienced by university students?
4. What is the degree to which demographics impact perceived stress, time pressure, and utilize different leisure coping strategies?

CHAPTER 2

LITERATURE REVIEW

Responsibilities tend to increase during each developmental life stage as do stress and anxiety. Examining work/life balance issues for employed adults is integral to understanding the complexities surrounding this topic. Christiansen and Matuska (2006) highlighted the importance of examining work/life balance in developed countries as many studies show people experience stress related to a perceived imbalance in their lives. Christiansen and Matuska specifically focused on working individuals in developed countries as well as perceived imbalance. The term work/life balance may not be recognizable in underdeveloped countries and it is important to examine how people perceive their lives regardless of the number of actual work hours a person works. In order to understand the importance of work/life balance, Christiansen and Matuska reviewed the historical foundations for the desire to live a balanced life.

Aristotle believed well-being was dependent upon pursuing activities that were balanced with individual interests and goals (Christiansen & Matuska, 2006). Others have held to the notion that physical health can be influenced by emotions and native health practitioners maintained physical health required a balanced lifestyle. More modern day scientists such as Adolf Meyer and Hans Selye sought to prove the impact emotions have on physical health. Meyer was able to confirm that lifestyle habits influence mental health/illness and deemed this phenomenon psychobiology. Hans Selye developed the General Adaptation Syndrome theory, meaning the body can have a physically negative reaction to stress but that some stress,

"Eustress," is valuable (Christiansen & Matuska, 2006). Living a balanced lifestyle is important to human longevity and prosperity, and some theorists believe living a balanced life includes the integration of leisure (Mannell & Reid, 1999).

Utilizing the spillover and compensation theories, Mannell and Reid suggested that individual work skills may influence leisure choices (spillover) or an individual may compensate for the negative impacts of work by doing something quite different through leisure (compensation). Leisure has also been found to increase an individual's ability to return to work daily due to the feeling of being revitalized (Mannell & Reid). With regard to losing a job, retirement, or decreased work hours, research supports the idea that leisure involvement and satisfaction can serve as a coping strategy for dealing with negative emotions associated with lack of work (Mannell & Reid, 1999, for review).

Mannell and Reid (1999) predicted that the disparity between working too much and not enough will continue to exist and perhaps increase in the future, influencing the role and use of leisure. Three predictions concerning the role of leisure were discussed. One scenario Mannell and Reid considered is increased job satisfaction in the future will lead individuals to feel leisure may exist as an opportunity for escape or entertainment, but will not be directly influenced by an individual's work and will not be considered a necessary part of human functioning. A second possibility in the future will show leisure to be essential to quality of life, especially valued in society because the working world will only evolve slowly. A third possible scenario is that unemployment rates will soar and highly skilled work will plummet, during which individuals will have to turn towards leisure to develop new skills and find satisfaction in their lives.

Currently, in the United States of America, unemployment rates are high and jobs that skilled individuals qualify for are scarce. Access to and utilization of higher education and

specialized institutions are producing highly skilled workers, but unfortunately, there are not enough jobs for placing these skilled individuals. Leisure is somewhat valued by the general public, but rather limited monetary allocations toward government-funded leisure services raises doubt as to how we as a society value leisure. As the discussion of work/life balance continues to be at the forefront of many health and well-being conversations, Mannell and Reid's (1999) alternative scenarios for the future have differing implications as well. Continuing research on work/life balance is necessary in order to manage the range of possible employment scenarios.

The idea of utilizing leisure as a means to cope with life stressors is one way in which researchers are attempting to develop solutions to the work/life balance problem. Iwasaki (2003) identified a lack of clarity in the research surrounding leisure as a coping mechanism for stress as well as which type of leisure might be most effective for managing which type of stress. In order to better understand the role of leisure in stress management, Iwasaki chose a notoriously high stress population of employed emergency personnel workers and used various measurements to assess employee coping strategies. Findings included evidence that leisure can be a resource or strategically used to cope with stress, the type of leisure coping determines the effect on outcomes, individuals with high leisure coping beliefs have access to intrinsically satisfying resources, and leisure coping strategies immediately impact adaptive outcomes rather than physical health. Iwasaki called for further research to understand the positive impacts of leisure coping but also highlighted the potential health and economic benefits from incorporating leisure coping into organizational policies.

While examining the health of employed adults is essential, there is a preceding developmental stage, emerging adulthood, through which adults must transition (Arnett, 2000). Emerging adults' ability to manage stress may have implications for their ability to balance work

and life in later years. Since the terms "work/life balance" are not usually associated with emerging adulthood, the problems of time management and time pressure will be discussed representing a life imbalance emerging adults may experience.

Emerging Adulthood and Implications for Successful Adjustment and Development

Emerging adults are generally 18 to 25 years old and are mostly discussed as being college students. While an age range has been placed on the developmental stage of emerging adulthood, Arnett (2000) also acknowledged emerging adulthood is culturally constructed, meaning age does not necessarily have to be a factor. Life decisions, such as choosing a life partner or becoming financially independent, will determine the transition into and out of emerging adulthood. In industrialized societies, 18 to 25 years of age tend to mark the age range of attending higher education institutions where experimentating with life choices begins before assuming more mature and independent responsibilities such as marriage and a career.

By the age of 18, compulsory education has been completed and adolescents transition into experimenting with semi-independent choices. Identity has been cultivated, but is still being formed. Intimacy is on the horizon, but this developmental stage provides opportunities to become an individual and develop worldviews. The developmental tasks identity and intimacy are tangled in the transition process as new identities form as an individual becomes more independent. Arnett (2000) further highlighted individuals in this developmental stage do not see themselves as adolescent, due to increased independence and responsibilities, or adult because they feel qualities such as accepting responsibility for the self, independent decision making, and financial independence are essential characteristics of mature adults. Thus, emerging adulthood stands alone as a developmental stage due to the intricacies of life at this point.

While research focusing on emerging adults does not always specifically state the use of Arnett's (2000) theory of emerging adulthood as a theoretical background, extensive research continues to be conducted on college students. Researchers (Ackerman & Gross, 2003; Arnett, 2000; Newton, Kim, & Newton, 2006; Nonis, Hudson, Logan, & Ford, 1998) claim that transitioning into college can be difficult and stressful while students experiment with decision-making, which is consistent with Arnett's (2000) theory of emerging adulthood. Building foundational skills in health and well-being during this stage in life may be essential to development for the rest of life.

Ryan and Deci (2000) presented self-determination theory as a way of examining human motivation and personality in relation to self-regulation and development. Humans inherently seek out experiences that are challenging and perhaps novel to their everyday lives. We gain a sense of accomplishment and become well rounded and creative through these experiences. However, external factors such as unfulfilling work, inability to play, and various life obligations can hinder the ability to find activities and experiences that are intrinsically motivating. *Vital engagement* is human participation in an on going relationship with an individual and/or experiences that are meaningful to the individual (Nakamura & Csiksentmihalyi, 2003). Individuals who engage with their surrounding world and develop personal goals, interests, and values consistent with that experience have more opportunity for well-being in life. An underlying component of vital engagement is the experience of flow.

Flow occurs when one is fully absorbed in an activity or experience and one feels a sense of satisfaction or reward after completing. Finding flow in activities or experiences can aid in motivation to continue to do something due to the previous rewarding experiences. Essentially, vital engagement and flow, self-determination, and intrinsic motivation aid individual's positive

experiences in life and can have a positive impact on the process of adjustment to new challenges and development.

Health Impacts of Leisure

Emerging adults may feel overworked, stressed due to life transitions, and anxious about the future, which can lead to negative impacts on health and well-being (Iwasaki, 2002). In order to develop successfully, one needs to learn how to cope with such stress on the psychosocial being. Leisure can be used as a coping mechanism for all people, but the importance of learning this behavior as emerging adults can mean the difference between an early death and a long, healthy life. In order to better understand leisure, Unger and Kernan (1983) divided leisure into the subjective and objective. Leisure in the objective form is as simple as freedom from work or obligations. However, Unger and Kernan recognized the need to examine leisure through the subjective lens. Intrinsic satisfaction, perceived freedom, involvement, arousal, mastery, and spontaneity are subjective dimensions found to be important to leisure participants.

Health benefits of leisure include physical (LaMonte & Chow, 2010), cognitive (Castelli, 2010), emotional (Wiersma & Parry, 2010), and social well-being (Keller, Fleury, & Rogers, 2010) even into later life (Dupuis, 2008). In a review of physical activity and leisure literature, LaMonte and Chow found physical activity during leisure can lead to the same health benefits as physical activity for maintenance. Castelli argued that physical activity increases and maintains cognitive functioning. Correlations between physical activity, cognitive functioning and overall health, however, are perhaps more easily measured than subjective health.

Even though subjective well-being can be difficult to measure, researchers continue to bridge the gap between objective and subjective bodies of knowledge. Wiersma and Parry

(2010) conceptualized leisure in terms of pathways to emotional health. Utilizing leisure intentionally as a coping mechanism, unintentional by-products of leisure, and leisure spaces have been found to contribute to emotional well-being. Keller et al. (2010) suggested physical activity during leisure could facilitate social support systems that in turn contribute to overall social well-being. Intentionally designed neighborhoods and communities that provide opportunities to increase one's social network could aid in social health.

Dupuis (2008) discussed leisure's contributions to overall well-being with respect to aging. Leisure can contribute to physical, cognitive, psychological, and social well-being, which is directly related to aging well. As people age, various health issues arise, sometimes interrupting our ability to conduct or participate in our typical leisure activities. Since leisure can influence well-being, emerging adults need to become familiar with coping through leisure in order to create a solid foundation to draw from in the future. In order to further understand why learning how to cope in emerging adulthood is essential to well-being throughout life, examining the intricacies of emerging adulthood is necessary.

The Complexities of Emerging Adulthood

Emerging adults face many life challenges including leaving the comforts of home for higher education (Arnett, 2000). The waning presence of parental/guardian supervision gives emerging adults the opportunity to begin making semi-independent decisions (Newton et al., 2006). These choices include decision making in regard to food intake, substance use, and alterations to physical activity. One major challenge emerging adults are faced with is how to remain academically successful while balancing schoolwork, social/family life, and employment (Ackerman & Gross, 2003; Nonis et al., 1998). It is easy to understand how stress may increase in the lives of emerging adults, which may influence the choices an emerging adult makes.

Excessive drinking, increasing intake of unhealthy foods, and lack of physical exercise are all factors that may contribute to the weight gain seen in emerging adults (Newton et al., 2006). In fact, Nelson et al. (2008) examined national data and found that emerging adults were the most overweight or obese in comparison to other developmental stages. After exploring behaviors that could lead to emerging adults being overweight or obese, adolescents transitioning into emerging adulthood were found to decrease their physical activity. Emerging adults also begin or increase their consumption of food with poor nutritional value as well as sugary drinks. When combined with decreasing physical activity, weight gain follows suit. This sudden lifestyle change negatively impacts other realms of health and well-being as well.

Roughly 25% of emerging adults also struggle with depression which, if not properly dealt with, can lead to negative well-being implications in the future including decreased career satisfaction, lower level of goal attainment, issues in marital satisfaction as well as parenting, and substance abuse or addiction (Kuwabara et al., 2007). Not only does depression impact an individual's future, there are immediate impacts as well, such as the inability to maintain a healthy social life, which can make depression seem like a black hole that is impossible to escape. In order to better understand the complexities of depression in emerging adults, Kuwabara et al. (2007) conducted a qualitative study in which responses were collected from currently depressed emerging adults. Identity formation, maintaining relationships, and role transitions were found to be some of the challenges depressed emerging adults face in regards to successful transitioning through developmental stages. In coping with stress and depression, many emerging adults may turn to substance use to cope with their feelings.

Substance abuse in emerging adulthood is more prevalent than in any other developmental stage (Arnett, 2005). Identity is still being molded in emerging adulthood and the

desire to increase individual experiences before settling down may lead to drug and alcohol experimentation. Add instability, self-involvement, and inability to be completely independent into the mix and substance use can turn into a way to cope with the stress and confusion associated with being an emerging adult. Emerging adults are also attempting to share their experiences with others and build intimacy. This mix of emotions could potentially lead to the high rate of substance abuse in emerging adults (Arnett, 2005). The one possible linking factor to obesity, depression, and substance use is the inability to cope with stress. While many sources of stress can be identified in emerging adulthood, time management seems to be integral in the ability to balance aspects of one's life. Thus, the focus for this study is to examine stress due to perceived time pressure, which may highlight specific experiences that influence an individual's coping strategy.

Ackerman and Gross (2003) conducted a study in hopes of determining the effects of time pressure and time deprivation on college students' academic standing. Students who are employed may experience having little time or energy to complete their homework or be prepared for class. Time pressure, however, does not always lead to negative impacts on academic standing. Students reporting increased time pressure often allocate their time to more meaningful and educational pursuits. Time deprivation refers to the feeling of not being in control of time allocation, which may negatively impact a students' academic work. This study sought to determine if there was a relationship between free time and time pressure, time deprivation, overall GPA, enjoyment of classes, liking professors, and expectations of career success. Students with small amounts of free time were found to have the same enjoyment as students who reported larger quantities of free time. However, students with less free time did report feelings of increased time pressure and deprivation, which led to negative emotions.

While many outside variables were not measured in this study, collecting more information on time management patterns in emerging adults is essential to building a better understanding of the stress they experience.

Maintaining focus on stress due to time pressure, Nonis et al. (1998) discussed coping by managing time, specifically if perceived control of time influences stress-related outcomes in college students. The outcomes examined were academic performance, problem solving ability, and health. Perceived control of time has been researched in the performance outcomes and job satisfaction of employees, but not in college students.

Participants were from a southern state university and completed questionnaires that measured perceived control over time, perceived academic stress, perceived problem solving ability, perceived academic performance, and health (Nonis et al., 1998). Perception of control over time was found to influence reported health outcomes and problem solving ability. There was no significant influence of perception of control over time on academic performance. While no influence was found in regards to academic performance, the perception of control over time on health outcomes was an important finding. Discovering ways to empower emerging adults through their time management behaviors could eventually lead to improved ways of guiding emerging adults through their developmental stage. Wang, Kao, Huan, and Wu (2011) placed emphasis on the inability to manage what free time undergraduates do have and highlighted the importance of learning how to use free time.

Wang et al. (2011) argued undergraduate students needed to learn how to manage their free time more effectively to keep them from being bored or stressed due to lack of structured time. In fact, learning how to manage free time could perhaps lead to better quality of life. In order to determine whether or not free time management could lead to better quality of life,

Wang et al. conducted a quantitative study measuring Taiwanese undergraduate students' free time management and quality of life. The results revealed a positive correlation between management of free time and quality of life. Wang et al. noted that increased free time was not found to lead to improved quality of life, rather the ability to utilize free time effectively led to increased social and psychological quality of life. Wang et al.'s study demonstrates the intricacies of examining time management in college students. Not only does time management need to be assessed, but ways in which students manage time in specific realms of life is important to furthering an overall understanding of undergraduate student health and well-being.

Misra and McKean (2000) also examined time management in the lives of college students. They hypothesized that those who were able to allocate time effectively in all domains would have less negative physical and emotional responses to stress and that women and older students would be more likely to manage their time better than men and younger students. Participants were undergraduates from a mid-western university and they completed questionnaires that measured academic stress, leisure satisfaction, time management, trait and state anxiety, and basic demographic information. The results proved the hypotheses and also found that time management was a buffer for stress while leisure satisfaction only presented a weak correlation with stress management. The most interesting of the proven hypotheses concerns the differences in women's responses to stress versus men's.

Hilbrecht et al. (2008) examined gendered behavior in regards to time pressure in adolescents. The purpose of this study was to determine if there were differences in patterns of time use based on gender and age. Early adolescence was determined to be between 12 and 14 years of age and late adolescence between 15 and 19 years of age. The authors introduce this idea by highlighting that adolescents are already beginning to spend free time based on

stereotypical gender roles. Gender socialization, gender schema, and gender intensification theories contribute to the theoretical perspectives of Hilbrecht et al. Over 2,000 students in the Canadian school system participated as the questionnaires were distributed and completed during class time. The findings indicated that as adolescents age, they begin to fulfill socialized gender roles during their free time, meaning girls would increase their amount of domestic work while boys would continue to find plenty of time for leisure.

While the findings are more generalizable to adolescents, the argument can be made that these gender roles that begin to take effect in adolescence impact the potential differences in women's and men's stress management strategies in emerging adulthood. Much more research needs to be conducted concerning time management and stress due to the intricacies of understanding the complexities of emerging adults in general as well as based on demographic information. While weight gain, depression, and substance abuse may not always lead to the inability to develop successfully, the fact remains that emerging adults are a volatile age group, and it is essential to assist emerging adults in building a foundation of coping strategies for their immediate and long-term health (Newton et al., 2006). Fortunately, universities and colleges have begun to understand that a problem exists in regards to coping with stress, and some institutions offer programs they feel may be of use to their undergraduate students.

Current Institutional Intervention Programs

Since this study focuses on emerging adults as students enrolled in a university, it is important to examine what colleges and universities are doing to assist their students in this transition period. Higher education institutions recognize that the transition period during the first semester of the first year student is particularly difficult. Many universities and colleges offer courses in health, physical education, and seminar formats, but these may only be required

the first semester or are completely optional. The idea behind these first semester offerings seems to be to set the students up for success during their undergraduate experience, but students still seem to struggle throughout their years in school. Some universities have acknowledged this shortcoming and attempt to offer new and perhaps unique foundational courses for incoming first year undergraduate students (Newton et al., 2006; Pancer et al., 2004; Ratanasiripong et al., 2010)

One such intervention program was an 8-week behavior change program. Due to the increasing risk of gaining unhealthy eating and body maintenance habits, Newton et al. (2006) developed and implemented a health program that established healthy behaviors to test on incoming freshmen students. Participants were assessed to provide a baseline comparison for their health behaviors during their first 21 days on campus. The next step was an educational session during classes for students to learn about healthy behaviors and decide if they wanted to participate in an 8-week behavior change program. The behavior change program involved developing goals for change while student mentors assisted in the facilitation, support, and monitoring of participants over the 8-week period. The program also allowed for one option that left students more in charge of their own behavior change and another option to be more involved with student mentors and the group. Pre and posttests, program evaluation, and goal accomplishment data were analyzed.

Participants from the mentor-assisted group made significant improvements concerning behavior change and experienced stress reduction (Newton et al., 2006). The participants from the more individualized group made slight improvements in healthy behaviors or increased in unhealthy behaviors and experienced increased levels of stress. The conclusion was drawn that implementing a health behavior change program that allowed for some autonomy as well as

support from facilitators could improve health choices. The program should be implemented on other campuses as well as to upper classmen to discover the impact. Also, examining personal factors such as self-confidence and motivation behaviors could aid in understanding reasons behind choosing to or not to change health behaviors.

Ratanasiripong et al. (2010) harnessed a unique training program in hopes of reaching more first year students. Biofeedback training is a process in which individuals learn to control their physiological reactions to stress and anxiety. First participants become aware of their physical reactions to stress and anxiety and then they begin a training program that helps them learn to control their physical reactions leading to a better functioning student. However, the devices and training needed to implement the programs are costly. Not only are they costly, but programs were also found to dissolve once the trained program leaders left to train at other institutions.

In hopes of solving monetary and longevity issues, the researchers found a portable machine that could that still provide biofeedback training, but was drastically less costly and still aimed to reduce stress and anxiety levels. They were able to purchase several portable machines and some that even connected to a PC for student ease of use. These machines were also user friendly and did not require a trained individual. The participants were even able to take units home and practice recognizing and managing stress. While this is an innovative and newer technique in assisting emerging adults in coping with stress, biofeedback training could offer an essential foundation in targeting stress and learning how to control one's physical reactions.

A more conventional form of assisting emerging adults with their transition into college is a semester long support group. In attempting to uncover key stressors for students and strategies to develop resources to overcome stressors, Pancer et al. (2004) surveyed incoming

freshman students in regards to their expectation of their first semester. Responses were clustered into optimistic, prepared, fearful, and complacent. The students were then followed through their college career and the prepared students tended to be more successful overall. A separate study Pancer et al. conducted was intended to determine if students were receiving the social support they needed. They found a strong correlation between social support and adjustment to university life. In hopes of bridging the gap between successful and unsuccessful students, the researchers developed a program, based on their previous findings, called "Transition to University" (T2U) that focused not only on academics, but social aspects as well.

Participants met once a week during their first semester with the same group of 9 to 10 students. A graduate student or senior undergraduate student facilitated each meeting. During the meetings, participants were invited to share their thoughts and feelings with the group and later work through the specific theme for the week. Sessions lasted between 75 to 85 minutes. In order to determine whether or not the T2U program was useful, a control group of students was only given questionnaires and could not participate in the program. Both groups (T2U and control) were then administered questionnaires in November and March of their first year, March of their second year, and March of their fourth year.

By the end of the first year, the T2U participants had adjusted better to university life than the control group and continued to show benefits throughout their fourth year. An alarming statistic that emerged was by the fourth year, 28% of the control group participants had withdrawn from school while only 7.8% of the T2U participants had withdrawn. The follow through that these researchers showed is essential to the understanding of student needs as well as the success of programs universities open for their students. However, not all students will participate in an optional health course nor will they choose to use a required course for their

benefit. Ensuring that student needs are met during their first semester as well as every subsequent semester is essential to assisting emerging adults in developing healthy coping strategies.

Emerging adults experience transitional challenges that create stress throughout this developmental period. The way in which these challenges are met and dealt with may influence lifelong health and well-being behaviors. Due to the many potential sources of stress, this study focuses on stress due to time pressure in university students and the ways leisure activity and experience may mitigate that stress. As leisure can have positive impacts on health and well-being, leisure behaviors as stress management strategies are also explored. Lastly, university students were easier to gain access to, thus emerging adults are referred to here as university students.

CHAPTER 3

METHODOLOGY AND METHODS

Survey research is an appropriate approach to this subject because it can provide general information about trends and relationships for the study sample. Through the use of a questionnaire, inferences will be drawn from the sample and can be generalized to the specific population that is studied (Fowler, 2009). A survey is the preferred data collection procedure because of the ability to administer and collect the data in a timely manner as well as reach a larger sample of the population in a short amount of time. Comparisons are cross-sectional, as the data were collected once from each participant (Creswell, 2013). In this investigation, the questionnaire was administered online due to the availability of the Internet for the participants, ease of use, cost effectiveness, and limited availability of the researcher.

Participants

The public southeastern university from which participants were recruited had a total of 34,519 students enrolled in the fall of 2012. Of the total student body, 24,514 undergraduate and 6,603 graduate students were full-time (enrolled in 12 or more credit hours per semester) while 1,745 undergraduate and 1,657 graduate students were enrolled part-time. Specifically examining undergraduate students, 91% are from the state in which the public southeastern university is located, the average age is 21, enrolled women encompass 57% and men encompass 43% of the undergraduate population (The University of Georgia College Portrait).

Participants were recruited from the university's Psychology Department research pool and Counseling and Human Development Services Department research pool. The research pools were utilized due to their availability and the opportunity to access hundreds of university

students. Due to a pre-existing relationship, students within the Recreation and Leisure Studies program were also sought out as participants. Participants were also recruited from student organizations selected based on the relevance to the proposed study. More specifically, the organizations were selected if they appeared to be concerned with student life outside of the classroom.

The researcher visually scanned the on-line list of undergraduate and graduate student organization titles for keywords such as recreation, development, forestry, and public health. Once an organization was targeted, the organization description provided more details as to the organization's purpose. Participants from student organizations also extended the sample beyond those taking courses in psychology, counseling, and recreation-related subjects. The student organizations selected were Future Health Promoters, Public Health association, Student Government Association, Psychology Graduate student committee, Outdoor Adventure Club, Psychology Educator Development association, Professional School Counselor association, Human Development and Family Science Graduate student organization, Emerging Leaders in Sports and Recreation, DAWGS for a Healthier Generation, Counseling Psychology student organization, Community Counseling student organization, Association of School Psychologists, Active Minds, Warnell Graduate student association, and Advocating Safe Alternatives for Peers.

Participants had to be between 18 and 28 years old and full time students (enrolled for at least 12 credit hours). The age range was selected in order to encompass a slightly broader range of emerging adults than the age range of 18-25 suggested by Arnett (2000), as some students are non-traditional and may be older than the typical college student. Credit hours were also important to use in narrowing down participants. Since one of the main research questions

regards perceived stress and time pressure the researcher felt a full-time student may experience more stress than a part-time student. While the argument can be made that a part-time student may hold a full-time job and could experience more stress, full-time students remain the focus of this study.

The sampling design is multi-level as graduate and undergraduate students were recruited separately (Creswell, 2013). Participant benefits included having information regarding the findings of the study e-mailed upon request. Participants from the university research pools received .5 credits towards a semester requirement of six credits to fulfill research participation requirements. Information from participants was also confidential and the e-mails they provided were stripped from their data. The only perceived risk the participants encountered was the chance of bringing up negative emotions while assessing stress and time pressure. In the event a participant needed to seek out professional help during or after participation, the participants were directed to contact campus Counseling and Psychiatric Services.

Budget and Timeline for Completion

The study had no funding and had no monetary expenses as the researcher had previously purchased SPSS, and Qualtrics, the method of formatting and administering the questionnaire, is free for College of Education students. Neither committee members nor the researcher nor other associates will be receiving monetary compensation.

The study received IRB approval on August 21, 2013. Pilot testing occurred in late August and early September. Officers of previously identified student organizations received an e-mail requesting permission to utilize the organization's electronic mailing list in mid-September. Access to the Psychology research pool and Counseling and Human Development research pool was granted by mid-September as well. Recruitment e-mails including a link to the questionnaire were sent out on September 23, 2013. The questionnaire remained open from September 23-October 14, 2013.

Preliminary data analysis and the literature review will be complete by December 31st. Data analysis will be checked and completed by February. Interpretation of data and the discussion was completed in March followed by a thesis defense in early April. Suggested revisions will be made according to the committee and approval of the thesis for graduation is anticipated for May 2014.

Data Collection Procedures

Prior to participant recruitment, the researcher received approval from the Institutional Review Board (IRB) to conduct the proposed study. Participants were then recruited through specific student organization's electronic mailing list, recreation and leisure studies program, as well as the Psychology and Counseling and Human Development research pools. Student organization leaders were notified with a request to send the recruitment e-mail to their organization members. Once the organization leaders agreed, the complete recruitment e-mail with the survey link was sent for them to forward to members. Only six student organization leaders agreed to assist out of the sixteen that were contacted. The six student organizations that agreed to assist were Warnell Graduate association, Advocating Safe Alternatives for Peers, Human Development and Family Science Graduate student organization, Student Government association, Outdoor Adventure Club, and Future Health Promoters. Professors within the recreation and leisure studies program were contacted with similar e-mails requesting their assistance. Applications to be included in the Psychology and Counseling and Human Development research pools were completed and accepted.

All participants completed the questionnaire on-line between September 23 and October 14, 2013. Participants from the research pools accessed the questionnaire through the research pool's database while participants from student organizations and the recreation and leisure studies program accessed the questionnaire through the link received via e-mail. Once the questionnaire was closed,

data were recorded, and all identifiers were removed. Data files were kept in a locked cabinet in a locked office.

Measurements and Data analysis

The questionnaire was comprised of questions generated by the researcher and scales that were previously validated through quantitative research and had demonstrated reliability. They were also chosen due to their relevance to the concepts and research questions. Based on the focus of the study, the researcher decided to measure the concepts presented in Table 1. However, the researcher also included items in the questionnaire that were not part of the concepts behind the research questions because this was an evolving project and the researcher wanted to capture more information than what was necessary. Items that were not used to answer the main research questions were: researcher-developed questions regarding participant extracurricular activity; a scale derived from a dissertation measuring developmental relevance (Keen, 2007); a scale derived from the National College Health Assessment survey to discover participant knowledge and desire to learn about health topics offered by the university.
Based on the concepts that needed to be measured, the guiding research questions and sub-questions for this study are:

1. How much stress do university students feel?
2. To what extent is perceived time pressure and perceived leisure time discrepancy associated with perceived stress in university students?
    a. Is there an association between perceived time pressure and perceived stress?
    b. To what extent to students experience leisure time discrepancy?
    c. Is there an association between leisure time deprivation and perceived stress?
3. To what extent, and in what ways, are leisure activities intentionally used in coping with the stress experienced by university students?

a. What activities do students participate in for the purpose of relaxing?
b. Is there an association between stress level and relaxation technique?
c. To what extent are participants' leisure coping orientations associated with perceived stress?

4. What is the degree to which demographics impact perceived stress, time pressure, and utilize different leisure coping strategies?

a. Is there an association between gender and perceived stress, time pressure, and different leisure coping styles?
b. Is there an association between year in school and perceived stress, time pressure and different leisure coping styles?
c. Is there an association between colleges within the university and perceived stress, time pressure and different leisure coping styles?

Software from the *Statistical Package for the Social Sciences* (SPSS) was used to address each of the research questions. See appendix A for the actual questionnaire that was used.

Potential Research Implications

I anticipated students' use of leisure coping strategies to be associated with lower stress and fewer time allocation discrepancies. This could imply that universities and colleges need to continue to determine how best to meet the needs of their students, calling for more research in determining exactly how to do so. Healthy lifestyle courses exist for incoming freshman, but not for others including graduate students. One of the sections of the questionnaire asks students if they feel like they have had enough support from their university in regards to health and well-being. Answers to this question could highlight a discrepancy in the services provided and how the students perceive their needs are being met as well as an awareness discrepancy of services available to the student.

Dissemination of the Results

The results of this study will be shared as a thesis project for a Master of Arts degree. Specific portions of the research were presented at the Southeastern Recreation Research (SERR) conference March 30-April 1, 2014. An application was also completed to present at the National Recreation and Parks Association Leisure Symposium in October 2014. The results will also be shared with participants who chose to give their e-mail address to the researcher during the questionnaire. The researcher will also be pursuing a Ph.D. and hopes the proposed study will be able to be expanded upon or used as an influence for a dissertation.

Delimitations

One southeastern University was examined and only pre determined groups within that institution were sampled. Participants also had to be full time students as well as within the age range of 18-28. The survey was only accessible for 3 weeks and to those who had access or were able to gain access to a computer and the Internet.

Limitations

Participants were not randomly sampled from the entire student body, which makes the results difficult to generalize. Random sampling creates fairness in the probability of being sampled where participants have equal chances of being sampled, which reduces bias and increases the accuracy of statistical inference (Agresti & Finlay, 2009). Convenience sampling, where participants are recruited based on access and fit to the study (Keppel & Wickens, 2004), may result in sampling bias because participants will not reflect the population's demographics or any other generalizable information (Agresti & Finlay, 2009). The researcher also targeted specific groups based on key words, which creates a bias in the students that were recruited.

Participants also had to gain access to a computer and the Internet to take the survey, which might have been difficult for some students, specifically those who do not have access to a

computer and the Internet unless they are physically on campus. Enough data to compare graduate and undergraduate students was also difficult to obtain, meaning the developmental comparisons are not part of the data analysis results. As I am also targeting specific groups of students in the middle of the semester, many may choose not to participate due to time stress or lack of understanding the purpose of the study, perhaps biasing the sample to those who are in more control of their time to begin with.

Table 1
Operationalization of Key Concepts

Concept/Variable	**Questions**
Demographics	
College	Which college is you major in?
Gender	What is your gender?
Age	How old are you?
Year in School	What year are you in school?
Marital Status	Are you married or living with a significant other?
Current Stress	
Perceived Stress	Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)
Time Pressure	
Perceived Time Pressure	Perceived Time Pressure and Time deprivation scale (Ackerman & Gross, 2003)
Perceived Leisure Time Discrepancy	• Considering an average weekday, estimate the amount of time in hours you give to the following activities: • Now, without changing your commitments to school, what would be your ideal allocation of time on an average weekday:
Coping Strategies	
Relaxation techniques	• When you feel stressed, do you intentionally do things to relax? • Please list the things you like to do in order to relax • During the last month, how often did you engage in one of your relaxing activities?
Leisure Coping Strategies	Leisure Coping Strategy Scale (Iwasaki & Mannell, 2000)

CHAPTER 4

RESULTS

Sample Characteristics

Participants were asked to divulge certain characteristics such as age, gender, year in school, and what college their major is in within the university. Table 2 presents information regarding participant age and year in school.

Table 2
Crosstabs: Year in School and Age

	Age										
Year in School		18	19	20	21	22	23	24	25	26	27	Total
Freshman	2	96	12	0	0	0	0	0	0	0	0	110
Sophomore	0	0	23	4	0	0	0	0	0	0	0	27
Junior	0	0	1	31	5	0	1	0	0	0	0	38
Senior	0	0	0	0	38	12	4	0	0	0	0	54
1st Year Graduate	0	0	0	0	0	3	1	1	0	0	0	5
2nd Year Graduate	0	0	0	0	0	2	2	6	1	2	2	15
Total	2	96	36	35	43	17	8	7	1	2	2	249

The majority of participants were freshman and 18 years of age at the time of participation. Participants were also presented with the question "What College is your major in?" Table 3 presents participants representative college and year in school.

Most participants (85 out of 249) were undergraduate students enrolled in the College of Arts and Sciences. The sample represented all colleges within the University, with the College of Public Health, the College of Education, College of Business, College of Family and Consumer Sciences, and College of Journalism and Mass Communication all totaling over 20 participants each.

Table 3
Crosstabs: College and Year in School

College	Year in School					Total
	Fresh.	Soph.	Junior	Senior	Graduate	
College of Arts and Sciences	48	5	13	19	0	85
College of Public Health	4	5	9	7	18	43
College of Education	19	4	2	6	0	31
Other Professional	39	13	14	22	2	90

A total of 269 responses were collected, but only 249 (92%) were adequate for analysis. Throughout the following pages the total number of participants for each analysis will vary depending on usable data. The following findings are specific to this sample because the participants do not adequately represent the population of the university.

Research Questions

The research questions will be presented individually with corresponding data analyses. Discussion will follow in the next chapter.

Research question number 1: How much stress do University students feel?

The perceived stress score was derived from the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). Participants were asked a series of ten questions that were developed to gauge perceived stress such as "In the last month, how often have you felt stressed?" (Appendix A, items 15-24, p.68-70). Answers participants chose from were never, rarely, sometimes, often, and very often. The answers ranged from one to five, which were then summed to calculate total perceived stress scores. Total perceived stress scores could range from 10 (low stress) to 50 (high stress). The actual perceived stress scores ranged from 12 to 48. The total perceived stress scores are shown in Figure 1, depicting fairly normal distribution with variation in scores. The mean, standard deviation, minimum and maximum are reported in Table 4.

Figure 1
Bar Graph: Total Perceived Stress Scores

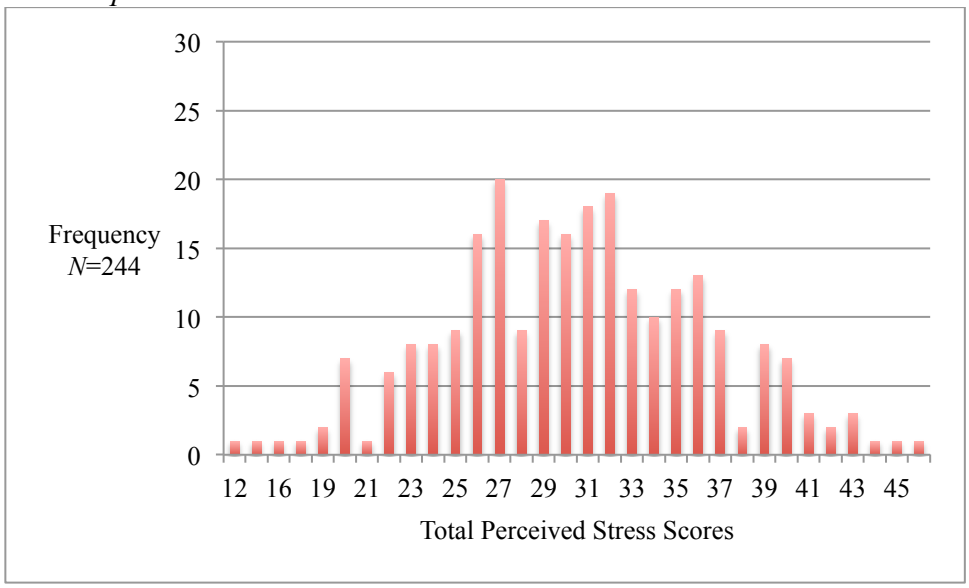


Table 4
Descriptive Statistics: Total Perceived Stress Score

Mean	Std. Deviation	Minimum	Maximum
30.475	5.963	12	48

In order to facilitate further analyses, the researcher divided perceived stress scores into groups of low (12-25), medium (26-32), and high (33-48) stress. The researcher decided to create the medium stress group out of the scores 26-32 because the frequency increases at the score of 26 and decreases at the score of 32. In examining Table 5, 18.4% of participants had low perceived stress, 47.1% had medium perceived stress, and 34.4% had high perceived stress. The mean score is also reported as 30.475, which falls in the medium stress range.

Table 5
Grouped Perceived Stress Frequencies

Grouped Stress Score	*n*	*N*	Percent
Low Stress (≤ 25)	48	244	18.4
Medium Stress (26-32)	115	244	47.1
High Stress (≥ 33)	84	244	34.4

Many factors contribute to perceived stress such as gender, year in school, and college of enrollment. These factors are examined in research question four.

Research question two: To what extent is perceived time pressure and perceived leisure time discrepancy associated with perceived stress in university students?

2a) Is there an association between perceived time pressure and perceived stress?

Participants were asked statements such as "During the last month, I felt as if I needed more time to do schoolwork" were derived from Ackerman and Gross's (2003) Time Pressure and Time Deprivation scale (Appendix A, items 8-12, p.67-68). Answers ranged from "very true" (1) to "not true" (3). The researcher did not use two statements due to the repetitive nature. The statements were then summed to create total perceived time pressure scores that could range from five to 15. The distribution of scores is presented in Figure 2. Lower scores mean participants felt more time pressure than those with higher scores. The mean, standard deviation and range are reported in Table 6.

Figure 2
Distribution of Time Pressure Scores

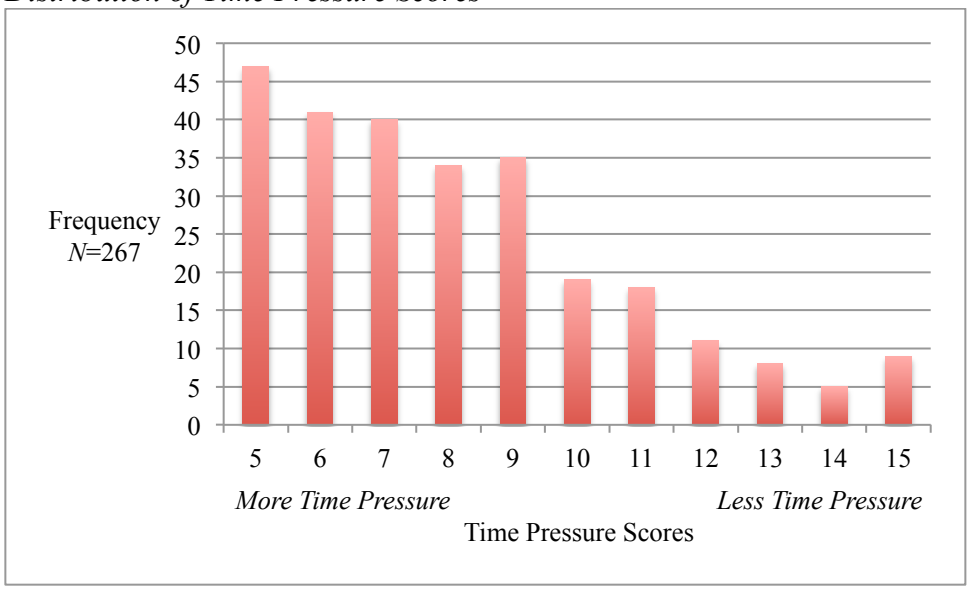


Table 6
Descriptive Statistics: Time Pressure

Mean	Std. Deviation	Minimum	Maximum
8.154	2.667	5	15

In order to facilitate further analyses, the researcher attempted to equally divide time pressure scores into three groups of low, medium, and high time pressure. There were 11 different scores possible with four scores in high and medium groups and three scores in the low group. In examining Table 7, 8.2% of participants reported low time pressure, 31.1% reported medium time pressure and 60.7% reported high time pressure. The mean score of 8.154 barely falls into the medium time pressure group. However, the high scores (as seen in Figure 2) may have impacted the mean. Also, it is important to note that the researcher chose to divide the groups into low, medium, and high, therefore the participants' feeling of time pressure may not be accurately reflected.

Table 7
Grouped Time Pressure Frequencies

Grouped Time Pressure Scores	*n*	*N*	Percent
Low Time Pressure (≥13)	22	267	8.2
Medium Time Pressure (9-12)	83	267	31.1
High Time Pressure (≤ 8)	162	267	60.7

In order to determine if an association between perceived time pressure and perceived stress, an analysis of variance (ANOVA) was conducted with perceived stress score as the dependent variable to determine if time pressure predicted perceived stress. As seen in Table 8, the ANOVA is significant at $\propto = .05$, $F(2, 241) < 27.215$, $\rho < .001$ meaning the mean stress level scores are statistically different from one another. As time pressure increases, so does perceived stress. In order to determine the group(s) where the significance exists, a post hoc comparison was conducted and is presented in Table 9.

Table 8
ANOVA of Perceived Stress by Time Pressure

	Time pressure (means)					
	Low (*n*=17)	Medium (*n*=73)	High (*n*=154)			
				F	*ρ*	*N*
Perceived Stress**	24.588	27.932	32.331	27.215	.000*	244

**Perceived stress level is on a scale of 10-50: 10 is no stress and 50 is highest stress

Table 9
Sidak: Post Hoc Comparison of Perceived Stress between Time Pressure Groups

	Mean Difference	Std. Error	Sig.
High vs. Medium	4.399*	.779	.000
High vs. Low	7.743*	1.383	.000
Medium vs. Low	3.343*	1.456	.066

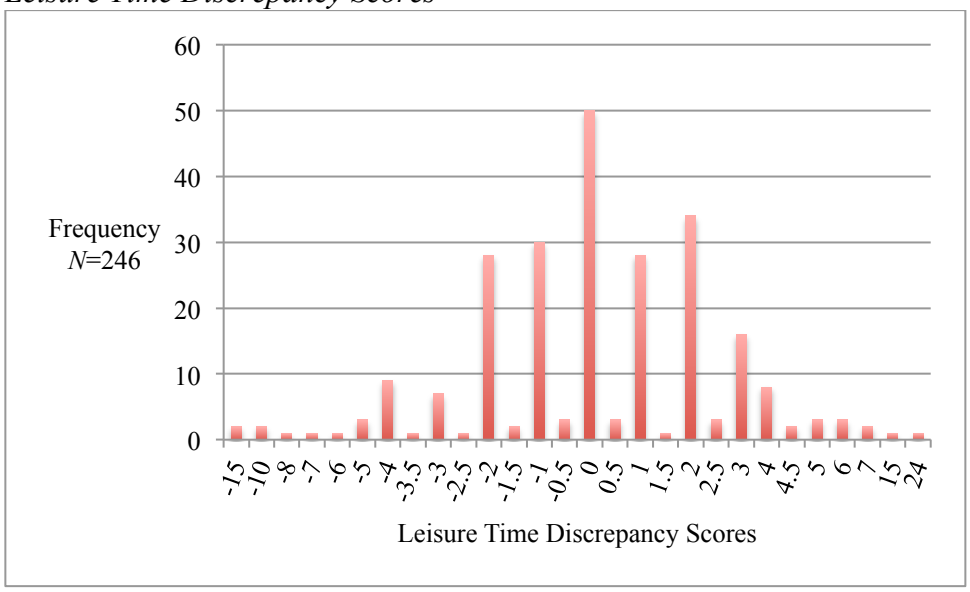
*The mean difference is significant

The post hoc comparison provides information supporting the assumption that there is an association between perceived stress and time pressure. As participant time pressure increases, so do their perceived stress levels. It is also important to note the high number (n=162 out of N=267) of participants that fall into high time pressure group. Those who experience low time pressure also experience low stress but those who experience medium and high time pressure experience medium stress. Regardless of stress level, however, the significant differences support the hypothesis that as student time pressure increases so do their feelings of stress.

2b) To what extent do students experience leisure time discrepancy?

Participants were asked to estimate the amount of hours a day they dedicate to work, classes and studying, family responsibilities, personal care and maintenance, socializing, other leisure activities, and other activities not mentioned (Appendix A, items 13 and 14, p.68). Participants were then asked to estimate their ideal allocation of time during the day to the same categories. Leisure time discrepancy was calculated using actual time and ideal allocation of time focusing on the activities socializing, other leisure activities, and other activities not mentioned. Socializing, other leisure activities, and other activities not mentioned were summed to create an actual time score and a desired time score. Leisure time discrepancy was calculated by subtracting the desired time score from the actual time score. A score of 0 means no leisure time discrepancy, a negative score means participants desire more leisure time and a positive score means participants desire less leisure time. The distribution of scores is presented in Figure 3.

Figure 3
Leisure Time Discrepancy Scores



There is a fairly normal distribution of leisure time discrepancy with variation in the scores. Roughly 50 participants reported they desired no change in the amount of time they dedicate to their daily leisure. Surprisingly, to the researcher, many participants reported they desired less daily leisure time. Regardless, there is a discrepancy between how much leisure time students desire and how much they feel they actually have.

2c) Is there an association between leisure time discrepancy and perceived stress?

Leisure time discrepancy scores were grouped into three groups based on participant responses. Those with negative leisure time discrepancy scores desired more leisure time (n = 91, 37%), those with scores of zero desired no change in leisure time (n =50, 20.3%), and those with positive scores desired less leisure time (n =105, 42.7%).

In order to determine if there if leisure time discrepancy predicted perceived stress, an ANOVA was conducted with perceived stress as the dependent variable. The results, presented in Table 10 are not significant at $F(2, 233) = 2.792$. While the ANOVA results did not immediately yield a significant result, a post hoc comparison, presented in Table 11, was

conducted due to the relatively low ρ value and the desire to explore if any differences existed between groups. It is also possible that if the discrepancy scores were grouped differently, the ANOVA would yield different results. Another factor to keep in mind is that participants may not have accurately reported their actual and ideal allocation of time due to reader error, questionnaire fatigue, or simply misjudging their time allocation.

Table 10
ANOVA of Perceived Stress Levels

	Leisure Time Discrepancy (means)					
	Desire decrease (*n*=103)	No change (*n*=45)	Desire increase (*n*=188)			
				F	*ρ*	*N*
Perceived stress level **	30.932	28.600	30.886	2.792	.063	236

**Perceived stress level is on a scale of 10-50: 10 is no stress and 50 is highest stress

Table 11
Sidak: Post Hoc Comparison of Perceived Stress between Leisure Time Discrepancy Groups

	Mean Difference	Std. Error	Sig.
Desire Increase vs. No Change	2.286	1.082	.103
Desire Decrease vs. Desire Increase	.046	.857	1.000
Desire Decrease vs. No Change	2.332	1.055	.082

*The negative redundant mirrored values were removed from the table

There is no apparent significant association between leisure time deprivation and perceived stress. However, it is interesting to note that those who desire less, no change, and more leisure time fall into the medium perceived stress range. Also, the fewest participants fell into the "desire no change" category, but the difference from the others only approached significance at ρ= .103 and .082, respectively. Another factor to remember is that the actual time and ideal time allocation scales were created by the researcher and have not been validated in other research.

Research question three: To what extent, and in what ways, are leisure activities intentionally used in coping with the stress experienced by university students?

3a) What activities do students participate in for the purpose of relaxing?

The participants were prompted with the following statement "The following questions are meant to gauge how you cope with your life stressors." Participants were asked if they intentionally did things to relax then they were asked to "List the things you do in order to relax." Because this was an open-ended response format, participants could write as many activities as they deemed necessary (Appendix A, items 25 and 26, p.70). Participant responses were then categorized into the categories presented in Table 12. Once categories were created, responses were coded as a "1" per category if they listed an activity or a "2" if they did not list that activity. Rest (n = 131, 48.7%), watching TV and surfing the Internet (n = 117, 43.5%), exercise (n = 108, 40.1%), and connecting with friends and significant others (n = 98, 36.4%), were the most commonly mentioned relaxing activities. The participants gave multiple responses so the total percentage totals more than 100%.

Rest includes sleeping, napping, getting a good night sleep, lying down, or taking a break. Exercise includes running, lifting weights, working out, going to the gym, playing sports, or dancing to music. Watching TV and surfing the Internet includes watching T.V., watching movies, surfing the Internet, *Pintrest*, or watching *Youtube*. Interacting with friends and significant others includes hanging out with friends, going out with friends, grabbing a meal with friends, calling or texting friends, venting to friends, attending parties, attending tailgates, attending sports events, using *Facebook*, using *Tumblr*, or blogging.

It is important to note that the categories may not accurately reflect what participants feel they do in order to relax. For instance, interacting with friends and significant others is separate from connecting with family because participants mentioned calling "home" or calling "mom" separate from calling a "friend." The researcher also felt many responses mentioning friends and

significant others suggested actual interactions while responses mentioning family mostly seemed that the connection was over a distance. Other responses such as "dancing to music" were categorized as exercise, though the respondent may not consider this exercise. Despite the struggles and limitations in interpreting open-ended responses, the researcher felt an open-ended response would capture activities that the participants actually do in order to relax. Participant responses could have been swayed if they were given pre-determined categories from which to choose.

Table 12
Relaxation Activities Frequencies

Category	*n* out of 228	Percent*
Rest	131	48.7
Watch TV and surf the Internet	117	43.5
Exercise	108	40.1
Interact with friends and significant others	98	36.4
Listen to music	54	20.1
Read	48	17.8
Eat	39	14.5
Meditate	36	13.4
Get outside	32	11.9
Create	27	10.0
Pamper	24	8.9
Connect with family	21	7.8
Pray or read Bible	12	4.5
Play video games and play on cell phone	11	4.1
Plan and organize	11	4.1
Smoke or drink alcohol	9	3.3
Look to help others	9	3.3
Work on school related things	7	2.6

3b) Is there an association between stress level and relaxation activities?

In order to determine if there is an association between stress level and reported relaxation technique a crosstabs analysis was used (Table 13) with perceived stress as the fixed factor to determine if stress levels influence relaxation activities. All relaxation activities were

examined in the crosstabs analysis, however, only the top four most commonly mentioned relaxation activities are presented along with one other activity that was found to be significant. It is essential to keep in mind that simply because participants did not mention a specific relaxation activity does not mean that they do not participate in an activity for the purpose of relaxing. With regard to the category "get outside," the number of participants who listed this as a relaxing activity is much less than the number of participants who did not, meaning the significance should be examined with caution.

Table 13
Grouped Perceived Stress and Relaxing Activity

	Perceived Stress Level					
	Low $n = 40$	Medium $n = 108$	High $n = 73$			
				N	χ^2	ρ
Rest	47.5%	58.3%	60.3%	221	1.871	.392
Watch TV and surf the Internet	47.5%	61.1%	41.1%	221	7.394	.025*
Exercise	62.5%	37.0%	52.1%	221	8.905	.012*
Interact with friends and significant others	45.0%	44.4%	38.4%	221	.782	.676
Get outside	30.0%	11.1%	11.0%	221	9.501	.009*

The significant $\rho < .05$ suggests watching TV and surfing the Internet and stress level are associated. In examining this category closer, 61.1% of those within the medium stress level watch TV and surf the Internet.

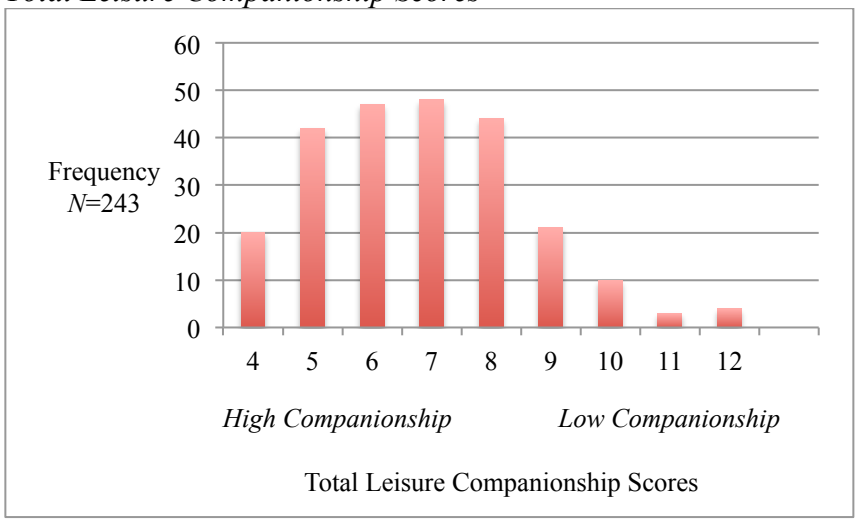
Exercise was also found to be statistically different across stress levels with $\rho < .05$ suggesting exercise and stress levels are associated. Those with low stress levels are more likely to exercise, as are those with high stress levels.

Getting outside was also found to be significant at $\rho < .05$, suggesting an association with stress levels. However, those who did list "get outside" as a relaxing activity are far outnumbered by those who did not list an activity within one of these categories. The significance of this association is difficult to interpret due to the low numbers.

3c) To what extent are participants' leisure coping strategies associated with perceived stress?

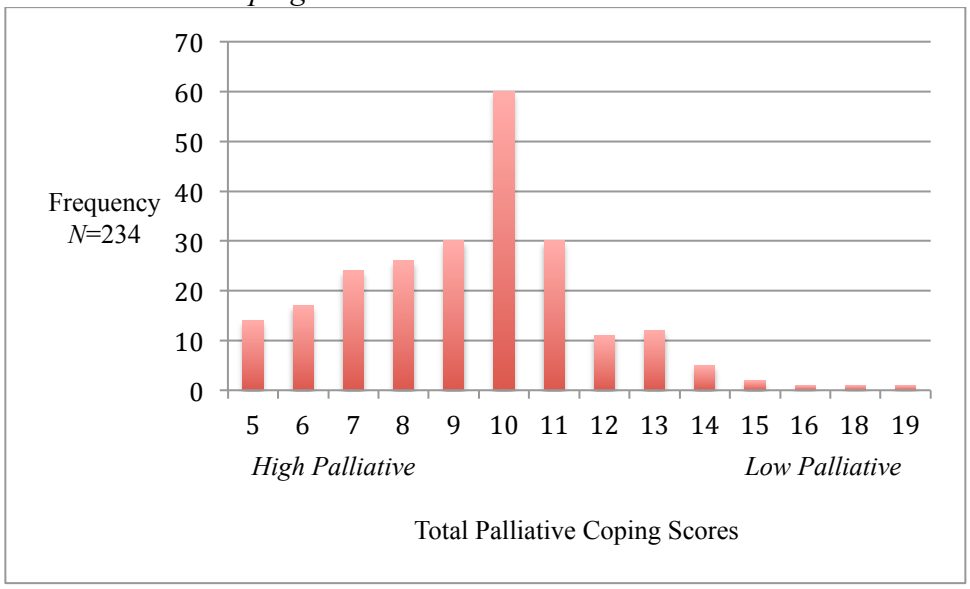
The Leisure Coping Strategy Scale (LCSS) was derived from Iwasaki and Mannell (2000) (Appendix A, items 28-40, p.71-73). Iwasaki and Mannell split the LCSS into three coping strategies: leisure companionship (ex: "My leisure allows me to be in the company of supportive friends"), palliative coping (ex: "I engage in a leisure activity to temporarily get away from the problem), and mood enhancement (ex: "I gain positive feelings from my leisure"). For this study, two questions from the leisure companionship scale were removed along with one from palliative coping and two from mood enhancement due to a repetitive nature. Leisure companionship questions were summed to create a total leisure companionship score, represented in Figure 4. The total scores can range from 4-16 with lower scores meaning the participants enjoy participating in leisure with others.

Figure 4
Total Leisure Companionship Scores



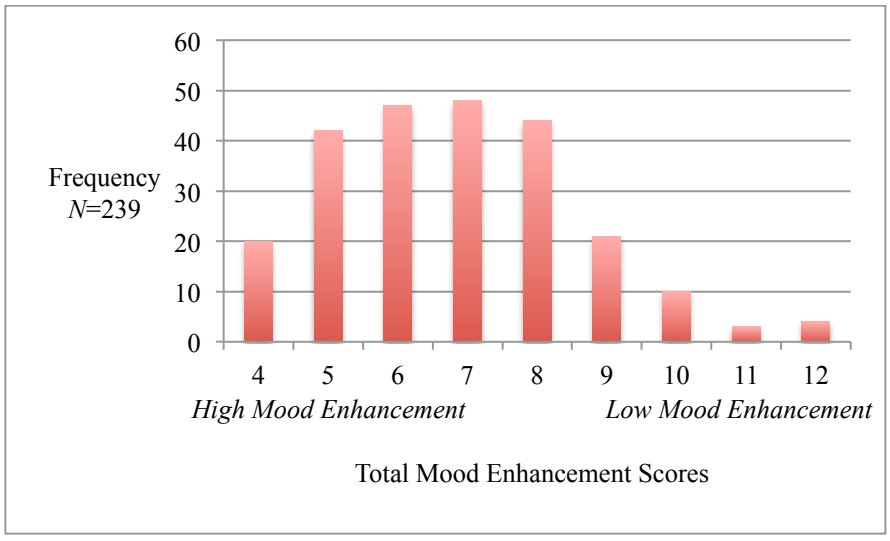
Palliative coping questions were summed to create a total palliative coping score, represented in Figure 5. Scores could range from 5-20 with lower scores suggesting the participants use leisure as a means to recover and feel revitalized.

Figure 5
Total Palliative Coping Scores



Mood enhancement questions were summed to create a total mood enhancement score, represented in Figure 6. Scores could range from 4-16 with lower scores suggesting that leisure may enhance participants' mood.

Figure 6
Total Mood Enhancement Scores



In order to determine if an association exists between leisure coping strategies and perceived stress, three ANOVAs, presented in Table 14, were conducted with perceived stress

levels as the fixed factor to determine if perceived stress predicts leisure coping strategy. The ANOVA is significant for mood enhancement and perceived stress levels at $\propto = .05$, $F(2, 216) < 10.056$, $\rho < .001$. The lower mood enhancement score (high mood enhancement) means leisure assists the participant in maintaining or regaining a good mood. The mean score of 7.292 in the high stress category suggests that leisure may not enhance their mood like it does with the lower stress group (mean score of 5.837). However, the mean mood enhancement scores are on the lower side of the mood enhancement score range suggesting that leisure may enhance one's mood regardless of stress level.

Table 14
ANOVA of Perceived Stress Level and Leisure Coping Strategy

	Perceived Stress Levels					
	Low $n = 43$	Medium $n = 104$	High $n = 72$			
Leisure coping strategy				F	ρ	N
Leisure Companionship	7.372	8.039	7.944	1.466	.233	219
Palliative Coping	9.209	9.442	9.319	.150	.861	219
Mood Enhancement	5.837	6.759	7.292	10.056	.000*	219

In order to better determine where the significant association exists, a post hoc comparison using Sidak's test was conducted and is presented in Table 15. The significant difference was found to be between the low stress and medium stress groups as well as the high stress groups suggesting there is an association between stress level and mood enhancement through leisure. This finding could suggest that those with higher stress levels are able to manage their mood through leisure or that those with low stress may have lower stress due to their participation in leisure that enhances their mood. Regardless of the inability to pin point why the association exists, this finding does support the idea that specific leisure coping strategies may help people manage stress.

Table 15
Sidak: Post Hoc Comparison of Perceived Stress Level and Mood Enhancement

	Mean Difference	Std. Error	Sig.
Low Stress vs. Medium Stress	-.922*	.305	.008
Low Stress vs. High Stress	-1.455*	.324	.000
Medium Stress vs. High Stress	-.532	.258	.116

*The mean difference is significant

Research question four: What is the degree to which demographics impact perceived stress, time pressure, and utilization of different leisure coping strategies?

4a) Is there an association between gender and perceived stress, time pressure, and different leisure coping strategies?

In order to determine if an association exists between gender and perceived stress, time pressure, and different coping styles, ANOVAs were conducted (Tables 16, 17, and 18). Gender was the fixed factor in order to determine if gender predicts perceived stress, time pressure, and coping style. One participant response was dropped from the analyses due to the preference to not divulge gender.

The ANOVA is not significant for gender and perceived stress, time pressure, and leisure coping strategies at $\rho > .05$.

Table 16
ANOVA of Gender and Perceived Stress

	Male *n*=34	Female *n*=207			
			F	*ρ*	*N*
Perceived Stress	28.735	30.662	1.866	.157	242

Table 17
ANOVA of Gender and Time Pressure

	Male *n*=34	Female *n*=214			
			F	*ρ*	*N*
Time Pressure	8.912	7.929	2.183	.115	249

Table 18
ANOVA of Gender and Leisure Coping Strategies

	Male *n*=30	Female *n*=191			
			F	*ρ*	*N*
Leisure Companionship	7.600	7.890	.363	.696	222
Palliative Coping	9.333	9.335	.009	.991	222
Mood Enhancement	6.933	6.707	.228	.796	222

4b) Is there an association between year in school and perceived stress, time pressure, and different coping styles?

In order to determine if an association exists between year in school and perceived stress, time pressure, and different coping styles, ANOVAs were conducted (Tables 19, 20, and 21).

The ANOVA presented in Table 19 and 20 is not significant for year in school and perceived stress or time pressure at $\rho > .05$.

Table 19
ANOVA of Year in School and Perceived Stress

	Year in School							
	Fresh. *n*=107	Soph. *n*=27	Jr. *n*=38	Sr. *n*=52	Graduate *n*=18			
						F	*ρ*	*N*
Perceived Stress	30.458	32.148	30.316	29.769	29.556	.832	.506	242

Table 20
ANOVA of Year in School and Time Pressure

	Year in School							
	Fresh. *n*=110	Soph. *n*=27	Jr. *n*=38	Sr. *n*=54	Graduate *n*=20			
						F	*ρ*	*N*
Time Pressure	8.036	7.259	8.053	8.185	9.050	1.411	.231	249

The ANOVA, presented in Table 21, is significant for year in school and leisure companionship at $F(4, 217) < 2.483$, $\rho < .05$. Graduates had the lowest leisure companion score suggesting that graduates are more likely to participate in leisure with others. Juniors and seniors also have lower leisure companionship scores. Freshman and sophomores have higher leisure companionship scores. However, a post hoc comparison yielded no significant differences

among leisure companionship means suggesting that the significance may have happened by chance.

Table 21
ANOVA of Year in School and Leisure Coping Strategies

	Year in School							
	Fresh. *n*=99	Soph. *n*=23	Jr. *n*=33	Sr. *n*=49	Graduate *n*=18			
						F	*ρ*	*N*
Leisure Companionship	8.091	8.739	7.667	7.367	7.111	2.483	.045*	222
Palliative Coping	9.576	8.869	9.061	9.388	8.944	.677	.609	222
Mood Enhancement	6.899	6.391	6.697	6.755	6.333	.682	.605	222

In order to explore this research question further, the researcher also grouped "year in school" responses into underclassman (Freshman and Sophomores), upperclassman (Junior and Seniors), and Graduate in hopes of finding an association. The ANOVA was not significant for perceived stress, time pressure, or leisure coping strategies. This could be due to low numbers of juniors, seniors, and graduate students, which make it difficult to find a statistically significant association, or there may not be an association.

4c) Is there an association between colleges within the university and perceived stress, time pressure and different coping styles?

Participants were asked to select what college their major was in. There are 16 colleges within the university. Initially, all colleges were analyzed using an analysis of variance (ANOVA), but there was no significant association between college and perceived stress, time pressure, or leisure coping strategies. The researcher then collapsed the colleges into the top three colleges and the rest were grouped into the "other professional" category. The "other professional" category includes the College of Agriculture and Environmental Science, College of Engineering, College of Environment and Design, College of Family and Consumer Sciences, College of Pharmacy, College of Veterinary Medicine, College of Journalism and Mass Communication, School of Ecology, School of Law, School of Public and International Affairs,

School of Social Work, College of Business, and the School of Forestry. Undergraduate students and graduate students were combined within colleges. ANOVAs, as seen in Tables 22, 23, and 24 were conducted in order to determine if college of enrollment predicted perceived stress, time pressure, and coping strategy.

The ANOVAs, were not significant for college and perceived stress, time pressure, and leisure coping strategies at $\rho > .05$.

Table 22
ANOVA of College and Perceived Stress

	College of Arts and Sciences *n*=84	College of Public Health *n*=41	College of Education *n*=31	Other Professional *n*=88			
					F	*ρ*	*N*
Perceived Stress	31.083	30.512	29.709	30.148	.547	.650	244

Table 23
ANOVA of College and Time Pressure

	College of Arts and Sciences *n*=88	College of Public Health *n*=49	College of Education *n*=32	Other Professional *n*=98			
					F	*ρ*	*N*
Time Pressure	7.909	8.327	8.688	8.112	.749	.524	267

Table 24
ANOVA of College and Leisure Coping Strategies

	Franklin College of Arts and Sciences *n*=79	College of Public Health *n*=38	College of Education *n*=27	Other Professional *n*=78			
					F	*ρ*	*N*
Leisure Companionship	8.076	7.474	8.037	7.756	.766	.514	222
Palliative Coping	9.367	9.026	10.074	9.192	1.133	.234	222
Mood Enhancement	6.772	6.632	6.963	6.679	.719	.234	222

CHAPTER 5

DISCUSSION

Summary

The purpose of this study was to explore relationships between perceived stress, time pressure, and leisure activity in college students. The research questions that guided this study were as follows: (1) How much stress do university students feel? (2) To what extent is perceived time pressure and perceived leisure time discrepancy associated with perceived stress in university students? (3) To what extent, and in what ways, are leisure activities intentionally used in coping with the stress experienced by university students? (4) What is the degree to which demographics impact perceived stress, time pressure, and utilization of different leisure coping strategies?

This was a quantitative study in which responses were collected once and there was a strict time frame in which the participants could respond. Participants were between the ages of 18 and 28 and were enrolled full time (12 credit hours) at the selected southeastern university. The findings from this study are not to be generalized to the entire student body, but are specific to this sample because these participants were not randomly sampled and the demographics do not adequately reflect those of the institution.

Discussion of Findings

Research question one: How much stress do university students feel?

The perceived stress score was derived from the Perceived Stress Scale (Cohen et. al, 1983). This was a 10-item scale with questions such as "In the last month, how often have you

felt that you were on top of things?" Answers ranged from "very often" to "never". The majority of participants were found to have medium stress levels, which is not surprising based on the research surrounding stress levels in university students. Emerging adults, which includes college students, may feel overworked, stressed due to life transitions, and anxious about the future (Iwasaki, 2002). Emerging adults face challenges such as leaving the comforts of home, semi-independent decision making, attaining financial support, and remaining academically successful while balancing other aspects of their lives (Ackerman & Gross, 2003; Arnett, 2000; Nonis et al., 1998). Something that is surprising is that the majority of participants did not have higher perceived stress levels. Perhaps university students are experiencing stress that has developed due to the natural developmental process and therefore are better able to manage stress. There was still the low number of participants with perceived stress scores above 33, falling in the high stress level. This finding suggests the stress of university life may be overstated to some extent or that students are effective in managing their stress levels.

Research question two: To what extent is perceived time pressure and perceived leisure time discrepancy associated with perceived stress in university students?

In order to address the stress related to balancing aspects of one's life (Ackerman & Gross, 2003; Nonis et.al., 1998), time pressure and leisure time discrepancy were examined.

Time pressure was assessed using five items from Ackerman and Gross's (2003) time pressure and time deprivation scale. Statements that were assessed as very true, somewhat true, and not true included "During the last month, I felt as if I needed more time to do schoolwork."

When analyzed with reference to perceived time pressure, perceived stress (dependent variable) was found to be significantly different across all time pressure groups. The higher the participant's time pressure, the higher their stress score. As participant time pressure increased,

so did their perceived stress. While this finding may seem simple enough to interpret, there exact ways in which time pressure contributes could only be speculated about.

Ackerman and Gross (2003) found that students who felt more time pressure might dedicate more time to meaningful pursuits. Time pressure is not necessarily a negative feeling as this study's participants could be excelling in all or several areas in their life because they feel time pressure. Nonis et al. (1998) found that perception of control of time was important in students ability to cope with time pressure and academic stress. This study's participants may still feel in control of their decision-making regarding time allocation and therefore may be managing their time and stress more efficiently because of time pressure and perceived stress. If in fact these participants manage their time better because of their higher levels of time pressure and perceived stress, it can be argued that the participants do not experience as many negative physical and emotional responses to stress as has been suggested (Misra & McKean, 2000).

Because time management and perceived control over time seem to be important to college students, leisure time discrepancy was also measured in order to explore relationships between leisure time discrepancy and perceived stress.

Leisure time discrepancy was measured by asking participants to fill in the number of hours in one day they felt they dedicated to socializing, other leisure activities, and other activities not mentioned. Then the participants were asked to fill in the number of hours they *desired* to dedicate to the previously listed activities. Leisure time discrepancy was then calculated by subtracting desired time from actual time.

Participants were found to desire more leisure time, less leisure time, or desired no change. Those who desired no change may feel like they manage their time effectively and therefore do not need to change their behaviors. However, those who desired less leisure time

may not manage their time effectively. Likewise, those who desire more leisure time may also struggle with managing their time effectively. Wang et al. (2011) argued that free time management could keep undergraduate students from feeling bored or stressed due to the lack of structured time. Their study results revealed a positive correlation between free time management and quality of life. If this holds true for this study sample, perhaps participants were struggling to find balance in their lives due to an inability to manage their free time. While free time management was not examined specifically, there are similarities in leisure time discrepancy and free time management. In order to determine if an association between leisure time discrepancy and stress exists, perceived stress scores and leisure time discrepancies were analyzed and no association was found.

Research question three: To what extent, and in what ways, are leisure activities intentionally used in coping with the stress experienced by university students?

The participants were asked to list, in an open-ended response format, the things they do in order to relax. The top four categories of relaxing activities were found to be: (1) rest, (2) watch TV and surf the Internet, (3) exercise, and (4) interact with friends and significant others. Surprisingly only nine participants explicitly claimed to smoke (marijuana or tobacco) or drink alcohol in order to relax. This finding does not support Arnett's (2005) discussion around emerging adults and substance use and abuse. However, there are limitations in the measure used for this study.

Participants were asked to list things they do in order to relax, leaving room for participants to fail to mention activities they do in order to relax which may have been forgotten. Participants also may not have felt like they could safely divulge information regarding substance use. Another limitation could be that participants drink or smoke when they interact

with their friends, watch TV, play video games, listen to music, etc. which may seem to be less important in their minds than the focal activity itself. Other limitations include the researcher misinterpreting participant statements and inaccurately categorizing an activity. Regardless, this study found that while students may not always be engaging in activities that are found to be beneficial to health and well-being, they are engaging in leisure activities to relax that do not necessarily involve risky behaviors such as substance use (Arnett, 2005). The researcher did, however, want to explore if an association exists between relaxing activities and stress levels.

The categories that were statistically associated with stress levels was watching TV and surfing the Internet, exercise, and get outside. The majority of those who claimed they watched TV and surfed the Internet fell into the medium stress level. It is possible that watching TV and surfing the Internet does not necessarily help lower stress, but serves as a distraction or an escape from stress. The majority of those within the low stress group claim to exercise in order to relax while over half of those in the high stress group also exercise to relax. The argument could be made that they are managing their stress and it could be worse, or exercise is not really helping them lower their stress levels, but it does offer them some bit of relaxation. Of those participants who claimed to get outside in order to relax, 30% within the low stress group get outside to relax. These participants may have lower stress because they are outside, or they can engage in an outside activity to relax because they have lower stress. It is also important to mention those that did not mention getting outside in order to relax. Roughly 90% within the medium and high stress groups did not claim to get outside in order to relax while 70% within the low stress level did not claim to get outside in order to relax.

There is a trend, in the most commonly mentioned activities that the majority of those who mentioned rest and watch TV and surf the Internet fell into the medium stress level range,

which is not surprising considering the majority of participants fell into the medium stress range. This also suggests that while participants are engaging in relaxing activities to cope with stress, they may not be lowering their stress specifically. Or, perhaps, these participants felt they were highly stressed, but these activities help them cope and eliminate stress.

It is also interesting to note that all of the relaxing activities could be considered leisure as the participants were potentially relaxing during their free time, or creating free time to relax. Leisure has many definitions, but generally, scholars have agreed that leisure contributes to health and well-being (LaMonte & Chow, 2010; Castelli, 2010; Wiersma & Parry, 2010; Gill & Bedini, 2010; Keller, Fleury, & Rogers, 2010; Dupuis, 2008). The researcher argues that if participants are participating in activities to relax, these activities are contributing to their overall health and well-being.

In order to examine the use of leisure coping in a more different way, leisure coping strategies and perceived stress were analyzed. The Leisure Coping Strategy Scale (Iwasaki & Mannell, 2000) was utilized for this measurement. Leisure coping strategies included leisure companionship (five items with statements such as: Engaging in social leisure is a stress-coping strategy for me), palliative coping (five items with statements such as: Escape through leisure is a way of coping with stress), and mood enhancement (four items with statements such as: Leisure helps me manage my negative feelings).

A statistically significant difference was found in mood enhancement across low, medium, and high perceived stress levels. This finding could suggest that those with higher stress levels are able to manage their mood through leisure or that those with low stress may have lower stress due to their participation in leisure that enhances their mood. Regardless of the

inability to pin point why the association exists, this finding does support the idea that specific leisure coping strategies may help people manage stress.

Iwasaki and Mannell (2000) utilized the Leisure Coping Strategy Scale in an analysis with specific stressors and found that participant leisure strategy choices (ie: leisure companionship, palliative coping, and mood enhancement) may be based on the source of stress the participants need to cope with or that leisure may provide an opportunity to cope. While specific sources of stress were not examined in this study, leisure coping strategies were. Participants pursued leisure activities to enhance their mood suggesting, similar to Iwasaki and Mannell's findings, that leisure was used to cope with specific sources of stress.

Research question four: What is the degree to which demographics impact perceived stress, time pressure, and utilize different leisure coping strategies?

Demographic information such as gender, year in school, and college within the university was used to explore whether demographics influenced perceived stress, time pressure, and leisure coping strategies. Misra and McKean (2000) found that women were more likely to manage their time better than men and that time management acted as a buffer to stress. However, in this study, no association was found between gender and perceived stress, time pressure, or leisure coping strategies.

No association was found between year in school and perceived stress or time pressure, but an association was found between year in school and the leisure coping strategy of leisure companionship. As the participants grade level increased, their average leisure companionship score decreased meaning as the year in school progressed, participants became more likely to use companionship as a leisure coping strategy. This finding is supported by Arnett's (2005)

discussion concerning emerging adults seeking intimacy. As emerging adults develop, they are more likely to seek shared experiences as they build intimate relationships.

No association was found between college of enrollment and perceived stress, time pressure, and leisure coping strategies. This could be due to the lack of evenly distributed participants across all colleges within the university as many colleges were underrepresented. No claims for this study can be made concerning college majors and stress levels or time pressure, but, further research is needed to determine if students in some areas of study experience more stress and time pressure than others and why.

Limitations

Limitations were previously mentioned in chapter three such as the sample not being random, targeting specific groups of students due to ease of access, and participant need to access a computer and the Internet. However, throughout the course of the study, more limitations have come to light.

The questionnaire was not completely made up of validated and reliable scales. Of the validated and reliable scales that were used, questions were eliminated or new answer choices were created. Also, different analyses were used in order to explore associations. While these are limitations that impact the validity and reliability of findings for this study, the researcher felt these changes were necessary for the exploratory nature of this study. Other questions that were utilized in the questionnaire were completely researcher-generated with the guidance of committee members. Of these questions, certain measurements, recoding, and categorizing may not be accurate with regard to what participants actually meant in their responses. The researcher has attempted to note during data analysis discussion and overall discussion the instances in which this occurred.

Implications for Future Research

Overall, the main findings generally supported those of previous research. However, the researcher was surprised by the lack of some of the findings as well. During the preliminary research process, that included the literature review, the researcher thought that students are in dire need of help coping with stress. Much of the literature that became the focus of this study concerned negative behaviors and consequences. However, the researcher found that while participants were stressed and did experience time pressure, their experiences may not be as negative as previously believed. Participants were found to have coping strategies that they voluntarily and knowingly engage in to cope with stress. This finding alone speaks positively of these participants' ability to identify a need and cope. This study has also highlighted areas in which more research is necessary.

Research could explore perceived stress levels before and after leisure activity participation to determine if leisure time and activity does manage to alleviate stress in university students. Time pressure could be explored more in depth with perceived stress to determine how perceived stress and time pressure are associated. As the researcher was surprised in participant responses regarding leisure time discrepancy, a reliable measure could be created and used to determine where time discrepancies exist, how this impacts the participant, and why the participant feels the way they do. Also, it is important to continue to explore what university students are doing in order to relax and cope with stressors. Furthermore, universities could utilize more reliable findings to determine how to meet the needs of the student body.

Most of the research cited previously has focused on freshmen, due to the presumed difficulty they face in making the transition from high school. However, the researcher feels it is imperative to explore the challenges other students are facing as well as the strategies they use to

cope with their challenges. Many factors have yet to be examined in this study as well as others that could contribute to a better understanding of the college population. Too many college students are met with struggles with which they are unable to cope. If we, as a society, want to build a stronger and healthier future, a better understanding of what is happening to our emerging adults is necessary.

REFERENCES

Ackerman, D.S. & Gross, B.L. (2003). Is time pressure all bad? Measuring the relationship between free time availability and student performance and perceptions. *Marketing Education Review, 13*(2), 21-32.

Agresti, A. & Finlay, B. (2009). *Statistical methods for the social sciences* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Arnett, J.J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469-480.

Arnett, J.J. (2005). The developmental context of substance abuse in emerging adulthood. *Journal of Drug Issues, 35*, 235-253.

Castelli, D. (2010). Physical activity and cognitive health. In L. Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making connections* (85-97). State College, P.A.: Venture Publishing.

Chick, G. (2010) Leisure – An overview. In L. Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making connections* (1-9). State College, P.A.: Venture Publishing.

Christiansen, C. H. & Matuska, K. M. (2006). Lifestyle balance: A review of concepts and research. *Journal of Occupational Science, 13*, 49-61.

Ciarrochi, J. & Scott, G. (2006). The link between emotional competence and well-being: A longitudinal study. *British Journal of Guidance and Counseling, 34*(2), 231-243.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396.

Creswell, J.W. (2013). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Gill, D.L. & Bedini, L.A. (2010). Health, wellness, quality of life: Accent the positive. In L.Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making the connections* (11-20). State College, P.A.: Venture Publishing.

Dupuis, S.L. (2008). Leisure and ageing well. *World Leisure, 50*(2), 91-107.

Fowler, F.J. (2009). *Survey research methods* (4th ed.). Thousand Oaks, CA: Sage.

Hilbrecht, M. (2007). Changing perspectives on the work-leisure relationship. *Annals of Leisure Research, 10*, 368-390.

Hilbrecht, M., Shaw, S. M., Johnson, L. C., & Andrey, J. (2008). 'I'm home for the kids': Contradictory implications for work-life balance of teleworking mothers. *Gender, Work and Organization, 15*, 454-476.

Hilbrecht, M., Zuzanek, J., & Mannell, R. C. (2008). Time use, time pressure and gendered behavior in early and late adolescence. *Sex Roles,58*, 342-357.

Horna, J. L. A. (1989). The dual asymmetry in the married couples' life: The gender-differentiated work, family, and leisure domains. *International Journal of Sociology of the Family, 19*, 113–130.

Iwasaki, Y. (2002). Testing independent and buffer models of the influence of leisure participation on stress-coping and adaptational outcomes. *Journal of Park and Recreation Administration, 20*(4), 90-129.

Iwasaki, Y. (2003). The impact of leisure coping beliefs and strategies on adaptive outcomes. *Leisure Studies, 22*, 93-108.

Iwasaki, Y. & Mannell, R. (2000). Hierarchical dimensions of leisure stress coping. *Leisure Sciences, 22,* 163-181.

Keen, R. (2007). *Time orientation and subjective well-being: A developmental analysis.* (Unpublished doctoral dissertation). University of Georgia, Athens, GA.

Keller, C., Fleury, J., & Rogers, C. (2010). Leisure and social health. In L. Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making connections* (100-107). State College, P.A.: Venture Publishing.

Keppel, G. & Wickens, T.D. (2004). *Design and analysis: A researcher's handbook* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Kreider, T. (2012, June 30). The 'busy' trap. *The New York Times.* Retrieved from http://opinionator.blogs.nytimes.com

Kuwabara, S.A., Van Voorhees, B.W., Gollan, J.K., & Alexander, G.C. (2007). A qualitative exploration of depression in emerging adulthood: Disorder, development, and social context. *General Hospital Psychiatry, 29,* 317-324.

LaMonte, M.J. & Chow, H. (2010). Leisure and physical health. In L. Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making connections* (51-60). State College, P.A.: Venture Publishing.

Mannell, R. C., & Reid, D. G. (1999). Work and leisure. In E. L. Jackson & T. L. Burton (Eds.), *Leisure studies: Prospects for the twenty-first century* (151-165). State College, P.A.: Venture Publishing.

Misra, R. & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies, 16*(1), 41-51.

Nakamura, J. & Csikszentmihalyi, M. (2003). The construction of meaning through vital engagment. In C.L.M. Keyes & J. Haidt (Eds.), *Flourishing: Positive Psychology and the Life Well-Lived* (83-104). Washington, D.C.: American Psychological Association.

Nelson, M.C., Story, M., Larson, N.I., Neumark-Sztainer, D., & Lytle, L.A. (2008). Emerging adulthood and college-aged youth: An overlooked age for weight-related behavior change. *Obesity, 16*(10), 205-221.

Newton, F.B., Kim, E., & Newton, D.W. (2006). A program to establish healthy lifestyle behaviors with freshmen students. *National Association of Student Personnel Administrators, 43*(3), 497-517.

Nguyen-Michel, S.T., Unger, J.B., Hamilton, J., & Spruijt-Metz, D. (2006). Associations between physical activity and perceived stress/hassles in college students. *Stress and Health, 22,* 179-188.

Nonis, S.A., Hudson, G.I., Logan, L.B., & Ford, C.W. (1998). Influence of perceived control over time on college students' stress and stress-related outcomes. *Research in Higher Education, 39*(5), 587-605.

Pancer, S., Pratt, M., Hunsberger, B., & Alisat, S. (2004). Bridging troubled waters: Helping students make the transition from high school to university. *Guidance and Counseling, 19*(4), 184-190.

Ratanasiripong, P., Sverduk, K., Hayashino, D., & Prince, J. (2010). Setting up the next generation biofeedback program for stress and anxiety management for college students: A simple and cost effective approach. *College Student Journal, 44*(1), 91-100.

Rizzolo, D., Zipp, G.P., Stiskal, D., & Simpkins, S. (2009). Management strategies for students: Immediate effects of yoga, humor, and reading on stress. *Journal of College Teaching and Learning, 6*(8), 79-88.

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.

Shinew, K. J. & Parry, D. C. (2005). Examining college students' participation in the leisure pursuits of drinking and illegal drug use. *Journal of Leisure Research, 37*(4), 364–386.

Staats, S., Cosmar, D., & Kaffenberger, J. (2007). Sources of happiness and stress for college students replication and comparison over 20 years. *Psychological Reports, 101,* 685-696.

The University of Georgia College Portait (2012). Retrieved from (http://www.collegeportraits.org/GA/UGA/characteristics)

Unger, L.S. & Kernan, J.B. (1983). On the meaning of leisure: An investigation of some determinants of the subjective experience. *Journal of Consumer Research, 9*, 381-392.

Wang, W.C., Kao, C.H., Huan, T.C., & Wu, C.C. (2011). Free time management contributes to better quality of life: a study of undergraduate students in Taiwan. *Journal of Happiness Studies, 52*(4), 561–573.

Welle, P.D. & Graf, H.M. (2011). Effective lifestyle habits and coping strategies for stress tolerance among college students. *American Journal of Health Education, 42*(2), 96-105.

Wiersma, E.C. & Parry, D.C. (2010). Leisure pathways to emotional health – Public health perspectives. In L. Payne, B. Ainsworth, & G. Godbey (Eds.), *Leisure, health, and wellness: Making connections* (61-69). State College, P.A.: Venture Publishing.

APPENDIX A

COPING STRATEGIES OF UNIVERSITY STUDENTS QUESTIONNAIRE

Dear participant,

I am a graduate student under the direction of Dr. Douglas Kleiber in the Department of Counseling and Human Development Services at The University of Georgia. I invite you to participate in a research study entitled Coping Strategies for managing Stress among University Students. The purpose of this study is to examine the coping strategies utilized by graduate and undergraduate students in managing stress and time pressure. Your participation will involve completing a questionnaire and should only take about 15-30 minutes. Your involvement in the study is voluntary, and you may choose not to participate, stop at any time, or skip questions you do not wish to answer without penalty or loss of benefits to which you are otherwise entitled. If you decide to withdraw from the study, the information/data collected from or about you up to the point of your withdrawal will be kept as part of the study and may continue to be analyzed. Every attempt will be made to keep your individually-identifiable information confidential. The Internet is not completely secure, but know that the researchers acknowledge this and will strive to keep your information private. Once data has been collected, any identifiable information such as IP or e-mail addresses will be stripped from your responses. The IP addresses will be deleted immediately while e-mail addresses, which you may voluntarily provide if you desire to learn about the findings, will be kept on a separate document until you have been informed of the findings. They will be immediately deleted after you have been informed. Results of the research study may be published, but your name or any identifying information will not be used. In fact, the published results will be presented in summary form only. The findings from this project may provide information on ways to better meet the needs of students in a university setting. There are some minimal risks or discomforts associated with this research. They include potential increased stress or anxiety while answering questions about stress. If you signed up to participate in the study through the Psychology Department RP Pool, you will receive a total of .5 Credits. You may fulfill your Psychology research requirement by doing an alternative assignment that does not involve participation in research but involves comparable effort and duration. You may ask your course instructor about this option. If you have any questions about this research project, please feel free to call Katherine Ann Jordan at (706) 614-0731 or e-mail jordanka@uga.edu or e-mail Dr. Kleiber at dkleiber@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 629 Boyd GSRC, Athens, Georgia 30602; telephone (706) 542-3199; e-mail address irb@uga.edu. By completing and submitting this questionnaire, you are agreeing to participate in the above described research project. Thank you for your consideration! Please keep a copy of this letter for your records.

Sincerely,
Katherine Ann Jordan

Upon the completion of the questionnaire, you will have the opportunity to request the results and findings from this study. You may exit the questionnaire at any time if you do not wish to continue as well as skip questions you do not wish to answer.

Q1: In order to participate in this study you must be a full time student enrolled at UGA as well as between the ages of 18 and 28. Are you a full-time (12 hours) student and between the 18 and 28 years old?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To End of Survey

Q2: The following questions are meant to gauge your extracurricular activity involvement. Please select the answer that best describes your involvement in the last month. In the last month, did you participate in a student organization activity?

- ❍ Yes (1)
- ❍ No (2)

Q3: In the last month, have you participated in training, practice, or games for a collegiate sport?

- ❍ Yes (1)
- ❍ No (2)

Q4: In the last month, have you been involved in an intramural sport?

- ❍ Yes (1)
- ❍ No (2)

Q5: Have you volunteered in the community during the last month?

- ❍ Yes (1)
- ❍ No (2)

Q6: Have you been employed during the last month?

- ❍ Yes (1)
- ❍ No (2)

Q7: Which College is your major in?

- College of Agriculture and Environmental Science (1)
- College of Education (2)
- College of Engineering (3)
- College of Environment and Design (4)
- College of Family and Consumer Sciences (5)
- College of Pharmacy (6)
- College of Public Health (7)
- College of Veterinary Medicine (8)
- Franklin College of Arts and Sciences (9)
- Grady College of Journalism and Mass Communication (10)
- Odum School of Ecology (11)
- School of Law (12)
- School of Public and International Affairs (13)
- School of Social Work (14)
- Terry College of Business (15)
- Warnell School of Forestry and Natural Resources (16)
- Other (please specify) (17) _____

Q8: The following questions are meant to gauge your time management patterns. Reflecting on the past month, think about your ability to manage your time commitments. Select the answer that best describes you in the last month. During the last month, I felt as if I needed more time to do schoolwork.

- Very True (1)
- Somewhat True (2)
- Not True (3)

Q9: During the last month, I felt I could have performed better in school if I had more free time.

- Very True (1)
- Somewhat True (2)
- Not True (3)

Q10: During the last month, I felt a lot of time pressure.

- Very True (1)
- Somewhat True (2)
- Not True (3)

Q11: During the last month, I often felt rushed.

- Very True (1)
- Somewhat True (2)
- Not True (3)

Q12: During the last month, I felt as if I needed more time for other things outside of school.
- ❍ Very True (1)
- ❍ Somewhat True (2)
- ❍ Not True (3)

Q13: Considering an average weekday, estimate the amount of time in hours you give to the following activities: (total must sum 24 hours)
_____ Work (at a job) (1)
_____ Classes and studying (2)
_____ Family responsibilities (3)
_____ Personal care & maintenance (including eating and resting) (4)
_____ Socializing (5)
_____ Other leisure activities (6)
_____ Other activities not mentioned (7)

Q14: Now, without changing your commitments to school, what would be your ideal allocation of time on an average weekday? (total must sum 24 hours)
_____ Work (at a job) (1)
_____ Classes and studying (2)
_____ Family responsibilities (3)
_____ Personal care & maintenance (including eating and resting) (4)
_____ Socializing (5)
_____ Other leisure activities (6)
_____ Other activities not mentioned (7)

Q15: The following questions are meant to gauge your perceived stress over the past month. Please select the answer you feel best describes you. In the last month, how often have you been upset because of something that happened unexpectedly?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q16: In the last month, how often have you felt you were unable to control the important things on your life?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q17: In the last month, how often have you felt nervous and "stressed"?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q18: In the last month, how often have you felt confident about your ability to handle your personal problems?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q19: In the last month, how often have you felt things were going your way?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q20: In the last month, how often have you found that you could not cope with all the things that you had to do?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q21: In the last month, how often have you been able to control irritations in your life?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q22: In the last month, how often have you felt that you were on top of things?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q23: In the last month, how often have you been angered because of things that were outside of your control?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q24: In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
- ❍ Very Often (1)
- ❍ Often (2)
- ❍ Sometimes (3)
- ❍ Rarely (4)
- ❍ Never (5)

Q25: The following questions are meant to gauge how you cope with your life stressors. Please answer to the best of your ability.
When you feel stressed, do you intentionally do things to relax?
- ❍ Yes (1)
- ❍ No (2)

Q26: Please list things you like to do in order to relax:

Q27: During the last month, how often did you engage in one of your relaxing activities?
- ❍ Daily (1)
- ❍ Once a week (2)
- ❍ Several times this month (3)
- ❍ Once a month (4)
- ❍ Never (5)

Q28: The following questions are meant to gauge the extent to which you use leisure in order to cope with stressors. Leisure activities can be defined as activities that are not part of a required daily routine. Leisure time is the "free time" not committed to work or other obligations. Please select the answer that best describes you. I deal with stress through spending leisure time with my friends.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q29: My leisure allows me to be in the company of supportive friends.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q30: Engaging in social leisure is a stress-coping strategy for me.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q31: Lack of companionship in leisure prevents me from coping with stress.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q32: I engage in a leisure activity to temporarily get away from the problem.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q33: Escape through leisure is a way of coping with stress.

- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q34: Leisure is an important means of keeping myself busy.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q35: Engagement in leisure allows me to gain a fresh perspective on my problems(s).
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q36: By escaping from the problem through leisure, I am able to tackle my problem(s) with renewed energy.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q37: I gain positive feelings from leisure.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q38: I maintain a good mood in leisure.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q39: My leisure involvements fail to improve my mood.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q40: Leisure helps me manage my negative feelings.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Not at all like me (4)

Q41: The following questions are meant to gauge where you are developmentally. Please select the answer that best describes you. Do you currently have children that live with you?
- ❍ Yes (1)
- ❍ No (2)

Q42: Do you think about having children in the future?
- ❍ Yes (1)
- ❍ No (2)

Q43: I think about my current child's future or the future I want to provide for the family I may have.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q44: I think about my career plans and opportunities.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q45: I think about getting married or spending my life with a partner.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q46: I think about ways to invest my money.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q47: I save for the future.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q48: I try to relax and enjoy the present.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q49: I think about where I want to be in five years.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q50: I feel like a fully independent adult.
- ❍ Very much like me (1)
- ❍ Somewhat like me (2)
- ❍ Rarely like me (3)
- ❍ Never like me (4)

Q51: The following questions are meant to gauge your perception of guidance and support you have received from the university. Please select all that apply.
Have you received information on the following topics from UGA:
- ☐ Depression and Anxiety (1)
- ☐ How to help others in distress (2)
- ☐ Nutrition (3)
- ☐ Physical Activity (4)
- ☐ Relationship Difficulties (5)
- ☐ Stress Reduction (6)
- ☐ None (7)

Q52: Are you interested in receiving information on the following topics from UGA:
- ❑ Depression and Anxiety (1)
- ❑ How to help others in distress (2)
- ❑ Nutrition (3)
- ❑ Physical Activity (4)
- ❑ Relationship Difficulties (5)
- ❑ Stress Reduction (6)
- ❑ N/A - Not Interested (7)

If you are interested in receiving information in regards to the above listed topics, please visit the UGA health center website at http://www.uhs.uga.edu as many resources are available to you as a student.

Q53: The following questions are basic demographic questions.
What is you gender?
- ❍ Male (1)
- ❍ Female (2)
- ❍ Prefer not to answer (3)

Q54: How old are you?
- ❍ Please specify your age (1) _____
- ❍ Prefer not to answer (2)

Q55: What year are you in school?
- ❍ Freshman (1)
- ❍ Sophomore (2)
- ❍ Junior (3)
- ❍ Senior (4)
- ❍ 1st year graduate (5)
- ❍ 2nd year graduate or more (6)

Q56: Are you married or living with a significant other?
- ❍ Yes (1)
- ❍ No (2)

Q57: Once the study has been completed and analyzed, I intend to create a newsletter for those who wish to be informed of the results and findings. If you wish to be informed of results from this study, please select yes and fill in your e-mail address. Your e-mail address will not be linked to your data and will only be used to send you the results of this study.

- ❍ Yes (1) _____
- ❍ No (2)

Thank you for dedicating your time and energy to this survey. If you feel the need to talk to someone about your feelings and thoughts that arose during your participation in this study, please contact the Counseling and Psychiatric Services (CAPS) at the UGA health center. The purpose of this study is to examine the relationship between leisure coping and managing stress due to perceived time pressure in college students. Your participation will aid the greater body of knowledge surrounding leisure research. By examining relationships between time pressure and stress, lack of leisure time and stress, leisure coping strategies among university students, we may be able to make suggestions to institutions on ways to better meet the needs of their students. We also aim to compare graduate and undergraduate student responses, as differences may exist in part due to differing developmental life stages. The results will be analyzed and discussed in my thesis. Again, every step will be taken to safeguard your responses and ensure you will not be able to identify yourself or others in the discussion of results. Thank you and have a great day!