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Comparing Strain at a Residential and a Commuter Campus: A Test of General Strain Theory

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COMPARING STRAIN AT A RESIDENTIAL AND A COMMUTER CAMPUS: A TEST OF
GENERAL STRAIN THEORY

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Philosophy

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May 2015

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Though originally developed with early adolescents in mind, General Strain Theory has been successfully adapted to help examine late adolescent as well as adult criminality. Specifically in the time period known as “emerging adulthood”, young adults experience many life changes that may make them more susceptible to strain, anxiety and pressure. If appropriate coping mechanisms are not available to these young adults, criminal or delinquent behavior may result. The present study assessed General Strain Theory utilizing a sample of college freshmen at two universities in the United States. Variables such as distance from home and self-esteem were measured along with the strain variables to determine the nature of the relationship.

The results of the present study indicate that students who attended the residential campus experienced more total strain than students who attended the commuter campus. In addition, students at the residential campus reported higher levels of substance use and alcohol use than students at the commuter campus. Additional analyses identified that students who identified as being Criminology/Criminal Justice majors drank significantly more alcohol than students with any other major, similar to previous research. Based on the current research, policies and programs concerning freshmen experience courses are recommended.

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CHAPTER ONE

INTRODUCTION

General Strain Theory, developed and tested by Robert Agnew, is grounded in the idea that crime is a result of an individual's inability to cope with the problems, issues, and stressors of society. It is the product of many historical strain theories, specifically, Merton's (1938) theory of anomie, which was one of the first criminological theories created in the United States.

According to General Strain Theory, individuals who are unable to attain success goals experience strain or pressure. Under specific conditions, these individuals can be expected to respond to this strain through crime (Agnew, 1992). Further specifying the theory, Agnew identified three different types of strain, the discrepancy between societal means and goals, the loss of something positive, and the presence of negative life events. Agnew added to his theory in 2001 by identifying strains that would be more likely to lead to delinquent or criminal behavior. The specific characteristics associated with these strains include; strain seen as unjust, strain seen as high in magnitude, strain associated with low social control, and strain that creates pressure to engage in criminal acts (Agnew, 2001).

Many test of General Strain Theory have provided universal support for the assumptions and framework of the theory (Agnew & White, 1992; Aseltine, Gore & Gordon, 2000; Paternoster & Mazerolle, 1994). Research has also examined gender differences in regard to General Strain Theory (Broidy & Agnew, 1997; DeCoster, 2010). This research has determined that differences between males and females exist in regard to appropriate and criminal coping mechanisms, which will be discussed further in Chapter Two.

General Strain Theory was originally developed to examine adolescent delinquent and criminal behavior. However, the theory has successfully been utilized to investigate late

adolescent and adult criminality (Aseltine et al., 2000; Listwan, Sullivan, Agnew, Cullen & Colvin, 2013), specifically criminality during the college years (Moon, Hays, & Blurton, 2009; Smith, Langenbacher, Kudlac, & Fera, 2013). This dissertation will explore research related to this specific time period and examine how General Strain Theory can explain criminality and deviance for students entering college.

First year college students are often faced with situations that can cause strain or stress. Higgins, Piquero and Piquero (2011) identified that feelings of strain can be heightened with increases in peer group size, and contact with the opposite sex, things that many college freshmen will experience. Ford and Schroeder (2008) examined the different types of strain identified by Agnew (1992) and classified which college situations fit into the strain criteria. The authors determined the loss of something positive might include poor grades, loss of scholarship funding, negative encounters with peers or faculty, and discrimination. The presence of noxious or negative life events could include poor physical conditions, physical or verbal abuse by peers, or harsh criticism from faculty (Ford & Schroder, 2008).

Transitioning to college is difficult for many students (Dyson & Renk, 2006). This is often the first time that they are away from home and they must learn to cope with the pressures and strains that they experience on their own. Oftentimes, freshmen students may be unprepared for the life events that they are experiencing (Dyson & Renk, 2006). These events can result in; changes in sleeping habits, changes in eating habits, increased work load, and the presence of new responsibilities (Ross, Niebling & Heckert, 1999). In addition to the presence of these situations that may cause strain, college freshmen are faced with a time period in their lives referred to as emerging adulthood (Arnett, 2000). This portion of life spans from the late teens to

the early twenties and includes the search for independence, information, and options for adult life (Arnett, 2000).

Emerging adulthood combined with the new experience of college, introduces many new stressful situations. These situations can increase feelings of depression and anxiety in individuals (Ford & Schroeder, 2008). Studies have shown that college freshmen who face these situations can, at times, see crime and deviance as one possible method for reducing the strain and negative emotionality that they are experiencing (Ford & Schroeder; Higgins et al., 2011). In addition, a study conducted by Moon, Hays, and Blurton (2009) identified that undergraduate students who experienced negative relationships with their teachers, racial discrimination, or goal blockage were more likely to engage in deviant behavior than those who did not experience these sources of strain.

The types of delinquency studied most often regarding general strain theory and college students are alcohol and drug use as well as academic honesty (Agnew & White, 1992; White, McMorris, Catalano, Fleming, Haggerty & Abbott, 2006). White and colleagues determined that undergraduate students who were away from home for the first time and shared housing with other undergraduate students were more likely to engage in alcohol and drug use. This increase in risky behavior was linked to decreases in social controls (White et al., 2006). In regard to academic honesty, the presence of academic stressors (poor academic performance and feelings of academic shortcomings) has been shown to increase academic dishonesty when tested on college undergraduates (Smith, Langenbacher, Kudlac, & Fera, 2013).

This study will utilize personal characteristics, such as gender, race, employment status, distance from home, high school grade point average, and number of school hours to determine if these factors have an impact on the strain experienced by the respondents. In addition, scales

have been included in the survey instrument to measure the emotional and family background of the respondents as well as their level of self-esteem. These factors impact levels of strain and the development of coping mechanisms (Agnew, 1992).

In regard to strain variables, legitimate coping strategies will be measured to determine how successful the respondents are when managing the strain that they experience. Stressful life experiences and negative affective state will be measured to identify if individuals have experienced the presence of a negative stimuli as well as their use of anger and other negative emotions. Finally, a scale regarding the respondent ability to reach their goals will be utilized.

The purpose of this study is to examine the levels of strain, as conceptualized by Agnew (1992), which college freshmen experience during their first semester. The stressors that the students experience (Dyson & Renk, 2006; Ross, Niebling & Heckert, 1999) will be measured to determine how these stressors influence the strain that the students experience. Once the stressors and level of strain have been measured, the researcher determined if this stress and strain leads to either criminal, deviant, or delinquent behavior or appropriate coping mechanisms and what factors may impact that choice.

The present study will also examine location and the potential effect that this could have on the level of strain that the individuals experience. Two separate universities in the northeastern United States will be utilized to compare the results regarding the variables in the study. Specifically, one of the universities requires the majority of freshmen students to live on campus. While specifics regarding the percentage of freshmen students who are exempt from this rule are not readily available, the only reasons for this exemption would be; the student is married and/or has dependent children living with them, the student is over the age of 21, the

student is a military veteran, or the student commutes no more than 50 miles from the home of their parents (Institutional Fact Book).

The other university that will be examined in this study is generally considered a commuter school. Other than this difference, the two universities are similar in regard to student characteristics and total undergraduate population. Specifically, the universities have similar total undergraduate populations, percentage of male and female students, and percentage of minority students. The only major difference between the populations at the universities concerns the percentage of students living on campus. This will allow for comparisons between the students attending both universities to determine if there are differences in regard to strain and control variables.

Chapter Two provides an in depth examination of the historical background of General Strain Theory as well as a detailed description of the current status of the theory. The central purpose of this dissertation is to present a test of General Strain Theory; therefore, it is necessary to provide a deeper understanding of the theoretical component. Additionally, this chapter will provide insight into the concept of Emerging Adulthood (Arnett, 2000) and how this idea relates to General Strain Theory. Finally, this chapter discusses the variables necessary for a complete test of General Strain Theory and the literature and research justifying these variables.

Chapter Three presents the methodology utilized for this study. The research questions and hypotheses are presented and discussed, including literature to support the proposed hypotheses. Chapter Three also includes a detailed description of each location and each university utilized in this study and how the specific characteristics of the locations could contribute to the results. The sampling technique that was chosen for this study is described along with the benefits and drawbacks of the method. In addition, data collection technique and

the specific variables that will be utilized in this study are discussed in detail along with the research supporting their use.

Chapter Four will provide a description of the results of the study, and Chapter Five will discuss these results and their implications. Furthermore, Chapter Five will discuss the potential policy implications, limitations of the present study, and directions for future research.

CHAPTER TWO

LITERATURE REVIEW

General Strain Theory, developed by Robert Agnew, stems from a long line of social structure and strain theories. The commonalities within these theories begin with the assumption that crime occurs as a result of variables outside of the individual. In other words, these theories are generally based on the assumption that human beings are not naturally criminal, but are led to criminal behavior through outside forces. Early social structure and strain theories discussed societal frustration as a factor in criminal activity. They believed that crime was the result of either coping or not coping with this frustration. Delinquent and criminal acts became the solution to solve the problems created by society.

Merton's Anomie Theory

Strain theories were not widely accepted in the United States until the publication of Robert Merton's theory in 1938. Merton identified that American society is set up in an egalitarian manner. This allows individuals to believe that all people have equal access to wealth. Because of this belief, all individuals strive to achieve the goals set out by society. These goals include wealth, status and happiness, essentially achieving the American Dream (Merton, 1938). Merton identified that these goals could be achieved by socially approved means, such as working hard, getting an education and saving money (Merton, 1938). Merton identified that these means were disproportionately distributed within the upper class, leaving the majority of individuals unable to utilize means approved by society.

This discrepancy between the goals of society and the means for achieving these goals lead to what Merton termed, anomie. Merton borrowed the term from Emile Durkheim's (1893) work regarding social change and the breakdown of society. According to Merton's (1938)

theory, anomie refers to the uncertainty and alienation that individuals feel as a result of the blocked access to the socially acceptable goals of society. When individuals do not have access to the means identified by society, they resort to crime and deviance to achieve the goals they have set for themselves. Their unachievable desires to reach the American Dream force them to choose one of five ways to adapt to the anxiety and frustration that they are experiencing, as shown in Table 1 (Merton, 1938).

Table 1

Adaptations to Strain

Adaptation	Cultural Goals	Institutionalized Means
Conformity	+	+
Innovation	+	-
Ritualism	-	+
Retreatism	-	-
Rebellion	+/-	+/-

Merton's first adaptation, Conformity, resulted when the individual chose to accept the legitimate goals and means of society. This individual would continue to attempt to achieve the American Dream through acceptable and approved means throughout their life. According to Merton (1938), the majority of people adapt in this manner. If not, the very existence of society would be threatened. The second adaptation, Innovation, occurs when individuals choose to accept the goals of society but develop new means for achieving these goals. These people lack the opportunity to engage in acceptable means to success, as a result, they create their own means for achieving success. According to Merton, much criminal behavior is a result of this adaptation.

The third adaptation, Ritualism, transpires when individuals choose to participate in the means for achieving the American Dream, however, they show little to no interest in the goals of

society and achieving those goals. These individuals accept their placement in life and accept that wealth and prestige are unlikely life outcomes. They are not seen as a threat to society because they are essentially following the rules set by society to govern behavior. In the fourth adaptation, Retreatism, individuals reject both the means and the goals of society. These individuals are socially and psychologically separate from society and retreat away from the goals and the means. The final adaptation, Rebellion, occurs when individuals replace the goals and means of society with their own definition of goals and means. They not only reject the values of society, but attempt to alter society as well (Merton, 1938). These individuals are seen as the most threatening and dangerous due to their disregard for the structure of society.

Merton's theory survived as the main strain theory in the United States for a long period of time. There were limitations, however, with Merton's theory that would eventually call for a revised strain theory. Overall, Merton's theory had weak empirical support (Burton & Cullen, 1992; Hirschi, 1969). The theory also did not explain why individuals respond to strain differently and did not deal with strain in groups other than the lower class. By the late 1980's, Merton's theory was seen as irrelevant and criminologists throughout the United States were calling for the rejection of the theory (Agnew, 1985).

Updated versions of Merton's theory, such as Institutional Anomie Theory (Messner & Rosenfeld, 1994) attempted to bring a more modern approach and revive the theory. Institutional Anomie Theory built off of the ideas of Merton (1938) and Durkheim (1893) but added more of a focus on economic institutions and the emphasis on the never-ending pursuit of monetary success (Messner & Rosenfeld, 1994). The authors stated that crime occurred in the United States due to this focus on economic gain above all else (Messner & Rosenfeld, 1994). Messner and Rosenfeld determined that individuals were forced, by society, to pursue this economic goal

through any means necessary, including criminal activity. Though Institutional Anomie (Messner & Rosenfeld, 1994) updated Merton's theory, a new strain theory was already being tested.

Agnew's General Strain Theory

In 1985, Robert Agnew outlined the need for a revised strain theory. He cited the criticisms listed above and argued for the development of additional research on strain theory in criminology. Agnew developed his theory over the next few years. It wasn't until 1992, however, that Agnew identified and published his revised theory, General Strain Theory. This theory was to focus on the individual and his or her social environment in regard to criminal behavior (Agnew, 1992). According to Agnew, his revised theory would focus strictly on negative relationships with others where the individual is either not treated fairly or is blocked from achieving goals that he or she views as important (Agnew, 1992). A second important aspect identified by Agnew is the presence of a negative affective state. This negative affective state allows the individual to believe that something needs to be done to correct a perceived wrong, which can sometimes lead to delinquency (Agnew, 1992).

Agnew (1992) identified three major types of strain, strain as the failure to achieve positively valued goals, strain as the removal of positively valued stimuli and strain as the presentation of negative stimuli. The first major type of strain, strain as the failure to achieve positively valued goals contains three specific types of strain, strain as the disjunction between (a) aspirations and expectations/actual achievements, (b) expectations and actual achievements, and (c) just/fair outcomes and actual outcomes (Agnew, 1992). The first, strain as the disjunction between aspirations and expectations/actual achievements, examines the strain or pressure that an individual may feel should they not obtain the skills necessary to achieve their goals through

the means set up in society. With this type of strain, the strain itself is measured in terms of aspirations and actual achievements (Agnew, 1992).

The second type of strain dealing with the failure to achieve positively valued goals is strain as the disjunction between expectations and actual achievements. This type of strain deals specifically with an individual's expectations of success and reaching their goals comparable to their actual achievements. These expectations, normally based on past experiences, can cause an individual to experience tremendous amount of strain if not achieved (Agnew, 1992). This can lead to a desire to close the gap between expectation and achievement, which can then lead to delinquency.

The final type of strain concerning the failure to achieve positively valued goals is strain as the disjunction between just/fair outcomes and actual outcomes (Agnew, 1992). If an individual feels as though he or she has been treated unjustly in a social or personal relationship, they will experience strain (Agnew, 1992). In order to balance the perceived strain, the individual may commit delinquent acts.

The second major type of strain is strain as the removal of positively valued stimuli. This type of strain concerns the actual or perceived removal of something that an individual values (Agnew, 1992). This loss may lead to delinquent behavior because the individual may try to prevent the loss, retrieve the lost stimuli, seek revenge for losing the stimuli or cope with the negative affective state that the loss of this stimuli has caused (Agnew, 1992).

The third major type of strain is strain as the presentation of negative stimuli. This type of strain examines the presentation of something negative in the individual's life. To manage the presentation of noxious stimuli, an individual may attempt to escape, terminate the negative stimuli, seek revenge on the source of the negative stimuli and/or cope with the negative

affective state that is a result of the presentation of the noxious stimuli (Agnew, 1992). Agnew identified that negative events will have more of an impact on an individual if they are greater in magnitude, recent, long in duration and close together or clustered in time (Agnew, 1992).

Agnew (1992) further identified that not all strain would lead to crime and delinquency. In the place of criminal or delinquent behavior, individuals could respond to the strain that they are experiencing with mechanisms that would allow them to cope responsibly. Agnew identified cognitive, behavioral and emotional coping mechanisms that individuals could employ. Cognitive coping mechanisms include ways of managing stress and anxiety by changing or reaffirming the way that one thinks about their situation (Agnew, 1992). This can be with phrases such as “It’s not that bad” or “I can do this”.

Agnew (1992) identified two types of behavioral coping mechanisms, maximizing positive outcomes/minimizing negative outcomes and vengeful behavior. With maximizing positive outcomes/minimizing negative outcomes, individuals may employ pro-social or delinquent behaviors (Agnew, 1992). This type of coping mechanisms allows them to behave in a way to eliminate or decrease the source of the strain in their life (Agnew, 1992).

The second type of behavioral coping mechanisms, vengeful behavior, corresponds with a desire to seek revenge on someone or something as a source of strain (Agnew, 1992). Though often thought of as being negative in nature, this vengeful behavior can be pro-social or delinquent.

The final type of coping mechanism, emotional, allows individuals to cope with strain by taking action against the negative emotions that they feel (Agnew, 1992). This can be done by things such as the use of illicit substances, physical exercise, meditation and deep breathing

and/or relaxation techniques (Agnew, 1992). Please see Appendix A for a detailed diagram of General Strain Theory.

Research on General Strain Theory

After initially publishing his theory in 1992, Agnew collaborated with other researchers in order to test General Strain Theory. A table outlining recent research on General Strain Theory can be found in Appendix B. Agnew and White (1992) attempted to measure General Strain Theory in regard to adolescent drug use. The researchers identified that the presentation of strain is more likely to lead to delinquent behavior when the constraints to nondelinquent coping are high and the constraints for delinquent coping were low and when the adolescent has a disposition for delinquent coping (Agnew & White, 1992). They hypothesized that the strain variable would have a positive effect on delinquency and drug use and that this would be conditioned by the presentation of delinquent friends and self-efficacy (Agnew & White, 1992).

Adolescents who possessed high self-efficacy would be less likely to respond to strain with delinquency because they are more likely to believe that they are in control of their lives (Agnew & White, 1992). This indicates that these adolescents are also less likely to blame others as the source of the strain that they experience (Agnew & White, 1992). The results of the study specify that negative life events and life hassles are the most important strain variables and that strain is most likely to lead to delinquency when self-efficacy is low (Agnew & White, 1992).

This initial test of General Strain Theory provided support for the theory and helped to establish it as a credible criminological theory. Most notably, this test provided support for the idea that delinquent friends would have an impact on an individual's choice to cope with strain pro-socially or delinquently, bringing an element most often associated with learning theories to General Strain Theory. Also, identifying that strain would result when self-efficacy is low adds

to the literature regarding coping mechanisms and why certain individuals would be more or less likely to respond to strain with crime and delinquency.

General Strain Theory was further tested in 1994 by Burton and colleagues (Burton, Cullen & Dunaway, 1994). The researchers set out to test General Strain Theory on a sample of adults as the majority of research on the theory had previously been tested only on juveniles (Burton et al., 1994). This study examined three separate measure of strain outlined by Agnew (1992). These measures were the gap between aspirations and expectations, blocked opportunities and relative deprivation (Burton et al., 1994). This study identified that the aspiration-expectation model did not relate to criminal behavior, however, perceived blocked opportunity and relative deprivation had a significant impact on adult criminal behavior.

Building off of Agnew and White's (1992) idea that General Strain Theory contained elements found in other theories, Burton and colleagues (1994) furthered their study by examining how measures from other theories would impact the results when introduced as controls in the data. After introducing these other explanations, the researchers concluded that though strain measures have a significant impact on criminality independently, other theories do a more comprehensive job of explaining criminal involvement (Burton et al., 1994). However, Burton and colleagues do identify that strain may have more of an impact on criminal behavior depending on the level of severity as well as the timing of the strain/criminal behavior relationship.

In 1994, Paternoster and Mazerolle conducted a comprehensive study of General Strain Theory with a longitudinal sample of adolescents. Their study attempted to bring further empirical evidence to support General Strain Theory by utilizing a longitudinal sample, which would show that General Strain Theory is able to explain criminal behavior over an extended

length of time. Paternoster and Mazerolle concluded that strain had a direct impact on delinquent behavior as well as an indirect impact by weakening inhibitions and increasing involvement with delinquent peer groups.

Paternoster and Mazerolle (1994) added to the literature supporting General Strain Theory by concluding that the revised strain theory makes a significant contribution to criminological theory in regard to explaining delinquent behavior. This study further conceptualized the strain variables and added to the testability of the theory as well (Paternoster & Mazerolle, 1994). Additional longitudinal studies in more recent years have duplicated these results (Slocum, 2010).

Hoffman and Miller (1998) set out to examine General Strain Theory from a latent variable structural equation model, which examined the effects of strain on attachment and delinquency over a three-year period. This study attempted to further the research regarding General Strain Theory by utilizing methodology other than cross-section or two wave panel designs. The authors measured strain by examining the number of negative life events that the participants experienced during the three-year period. Other variables, such as family and school attachment, grades and delinquency were also utilized for the study (Hoffman & Miller, 1998). Results of the study supported the significant impact that negative life events has on delinquent behavior, however, researchers failed to find supporting evidence of the three coping mechanisms identified by Agnew (1992). Hoffman and Miller identified that high or low self-efficacy or self-esteem did not have a significant impact on whether negative life events lead to increases in delinquency.

Aseltine, Gore & Gordon (2000) provided one of the most comprehensive tests of General Strain Theory in regard to the measurement of strain variables. The researchers utilized

a three-wave panel study to examine anger and anxiety and the impact that these variables had as mediators in a covariance structure model (Aseltine et al., 2000). The results of the study provided limited support for General Strain Theory, identifying that negative life events and conflict with family had a significant positive relationship with deviance (Aseltine et al., 2000). However, the authors indicated that strain may not generalize to forms of nonviolent deviance such as drug use (Aseltine et al., 2000).

Though generally supported by research since its development in 1992, Agnew's theory presented limitations. These limitations provided the background for Agnew to rework his theory in 2001. Agnew identified that the general nature of General Strain Theory caused the theory to be too broad in regard to the specific types of strain that researchers should focus on (Agnew, 2001). He went on to discuss how this broad nature has allowed General Strain Theory to be difficult to falsify (Agnew, 2001). Agnew set out to bring further specification to the types of strain most likely to lead to delinquency in an effort to build the empirical evidence surrounding General Strain.

In order to clarify the meaning of the term strain, Agnew (2001) defined the terms objective and subjective strains. Objective strains refer to events that are disliked by the majority of the members in a certain group (Agnew, 2001). Subjective strains are strains that are simply disliked by the individuals experiencing them (Agnew, 2001). To further study strains that are likely to lead to crime and delinquency, research must have an understanding of how objective and subjective strains impact an individual's behavior. This would allow researchers to be able to define criminal and delinquent behavior at the individual level as well as the group level (Agnew, 2001).

As mentioned, Agnew and White (1992) introduced the types of strain most likely to lead to crime as strains that are associated with high constraints to nondelinquent coping and strains that are present concerning an adolescent that has a disposition for delinquent coping. Agnew (2001) expanded on these ideas by identifying four characteristics of the types of strain most likely to lead to crime. These are (a) strains seen as unjust, (b) strains that are high in magnitude, (c) strains that are associated with low social control, and (d) strains that create pressure to engage in criminal coping (Agnew, 2001).

Agnew (2001) identified that strains that are seen as unjust are likely to lead to crime due to the individual feeling provoked to take action. This is believed to lead to anger and frustration, which makes an individual less likely to cope with strain responsibly (Agnew, 2001). Agnew goes on to determine that strains are more likely to be seen as unjust if they are believed to be associated with a voluntary or intentional violation of a justice norm. Strains that are seen as high in magnitude are likely to lead to crime because they decrease an individual's ability to cope with the strain in a noncriminal manner (Agnew, 2001). Strains that essentially have a bigger impact on the individual will cause intense feelings, which will then lead to criminal coping.

Strains associated with low social control will lead to crime because the low level of social control allows the individual to internally reduce the costs of the criminal act (Agnew, 2001). Even though strains associated with low social control are related to criminal behavior, strains associated with high social control can be linked to criminal behavior as well (Agnew, 2001). An example of this type of strain would be excessive parental supervision. Strains that create pressure to engage in criminal coping are strains that involve exposure to others who model or display criminal behaviors (Agnew, 2001). These individuals would encourage someone to engage in criminal behavior by presenting an alternative to pro-social behavior.

Research on General Strain Theory continued to examine the relationship between anger, strain and deviant/criminal behavior to further specify the exact role that anger plays. Mazerolle, Piquero and Capowich (2003), focused on whether this relationship might change in response to either trait-based or situational-based measures of anger. Trait-based anger is seen as a predisposition toward feelings of anger within an individual that are more likely to reflect stable patterns (Mazerolle et al., 2000). However, Mazerolle et al. (2003) determined that measures of situational anger may represent a more valid test of the theory. The researchers utilized a sample of undergraduate students who were given hypothetical vignettes (Mazerolle et al., 2003). Upon reading the vignettes, the students were to determine the likelihood that they would act as the individual described in the vignette had acted. Mazerolle et al. also utilized measures of strain, situational and trait anger.

The researchers concluded that if undergraduate students experienced strain by being exposed to events while at school, negative emotions would result and this would impact their behavioral choices (Mazerolle et al., 2003). The findings also determined that situational anger was a strong predictor of criminal/deviant behavior (Mazerolle et al., 2003). Overall, Mazerolle et al. (2003) found support for Agnew's (1992) theory, identifying that anger is a vital factor when explaining crime and deviance due to its ability to intensify feelings of injustice.

Building on the research provided by Agnew (2001) regarding subjective and objective strains, Froggio and Agnew (2007) further tested the distinctions utilizing a sample of Italian youth. While utilizing this specific sample leads to questions regarding applicability within the United States, several key points were identified. The authors determined that only one of the subjective strain measures, school failure, had a significant relationship with crime (Froggio &

Agnew). They identified that this can be explained by the idea that low grades indicate a weak investment and commitment to school (Hirschi, 1969).

Froggio and Agnew (2007) also examine the strain that individuals experience as a result of romantic breakups and separation from friends and family. Romantic breakups can be associated with criminal behavior if they are high in negativity (Froggio & Agnew, 2007). The authors identified that the breakup of significant friendships and separation from parents are not significantly associated with crime, however, the breakup of significant friendships comes closest to being significant (Froggio & Agnew, 2007).

Froggio and Agnew (2007) stated that they are unclear concerning the reasoning for separation from parents not having a significant relationship with crime. They relate this finding to two possibilities. First, separation from parents may not be significantly related to crime due to the age of the adolescent. Older adolescents may be better prepared to cope with separation from parents due to advances in maturity (Froggio & Agnew, 2007). Second, individuals in the sample who report that separation from parents is a problem tended to be the individuals who had the strongest relationship with their parents (Froggio & Agnew, 2007).

Delinquent and Nondelinquent Coping Mechanisms

One of the key components of General Strain Theory is the ability, or inability, of the individual to cope with the strain that is present in their lives (Agnew, 2001). As discussed, Agnew and White (1992) first identified that individuals are likely to respond to strain with crime if the constraints to nondelinquent coping are high and the constraints to delinquent coping are low, and when the adolescent has a predisposition to delinquent coping mechanisms. Research specifically detailing how coping mechanisms relate to General Strain Theory will be discussed below.

Brezina (1996) furthered the empirical research on General Strain Theory by examining the specific ways in which delinquent behavior can assist an individual in coping with strain. Brezina identified three classifications of delinquent adaptation: escape avoidance, compensation and retaliation. Escape avoidance occurs when individuals minimize the time spent in strain producing interactions, which reduces the likelihood that they will produce a negative affective state (Brezina, 1996). Compensation is the result of an individual lessening the strain by enabling or compensating for the removal of the positively valued stimuli (Brezina, 1996). Retaliation occurs when action is taken in an attempt to correct the strain. This allows the individual to take action against what or whom they feel is responsible for the noxious stimuli.

National survey data was utilized to examine the effectiveness of the delinquent coping mechanisms in regard to strain. The authors utilized the second and the third waves of the Youth in Transition survey (Brezina, 1996). This sample contained 2,213 male high school students interviewed between 1966- 1969 (Brezina, 1996). Brezina concluded that adolescents who experienced different types of strain also experienced negative affective states (anger, depression, anxiety). The delinquent coping mechanisms utilized by the adolescents minimized the negative consequences that the adolescent experienced. Brezina identified that the delinquent behaviors exhibited by the adolescents allowed them an escape or avoidance from strain. This research significantly contributed to the evidence regarding General Strain Theory because it begins to examine the function that delinquent behavior serves for the adolescent.

Agnew, Brezina, Wright and Cullen (2002) went on to test general strain theory by furthering the research concerning personality traits and how they relate to criminal or pro-social coping. The authors determined that characteristics such as negative emotionality as well as low constraints would lead to criminal behavior because they would allow the individual to respond

in an aggressive or antisocial manner (Agnew et al.2002). These personality traits encourage criminal behavior because they increase the chances that the individual will find the strain harmful or stressful.

Agnew et al. (2002) utilized data from the National Survey of Children to examine their ideas concerning negative emotionality and low constraints. The authors identified that individuals high in negative emotionality and low in constraint would be more likely to respond to strain with delinquent acts. The data indicated that the hypotheses identified by the authors were accurate and that having low constraints allowed the individuals to be less aware and concerned of the costs of crime, making this behavior seem more appropriate in strain inducing situations.

As mentioned, Agnew (1992) originally provided detailed information regarding appropriate coping mechanisms and criminal or deviant coping mechanisms. Overall, the literature since that point has supported the idea that behavioral, emotional and cognitive coping mechanisms that are available to the individual can be successful when dealing with strain. The studies described above add to the literature by further describing the characteristics that individuals possess who are prone to delinquent coping.

Gender Differences in General Strain Theory

Many criminological theories have examined the role that gender plays in the causes of crime and delinquency, these theories include Social Bonds (Hirschi, 1969) and Differential Association- Reinforcement Theory (Burgess & Akers, 1966) as well as a number of feminist theories strictly dedicated to that area of study. Though developed to be a broad theory that would be applicable for many types of crimes and criminals, General Strain Theory has widely been tested on male adolescents. The following portion of this literature review will discuss how

gender influences the strains that individuals experience as well as the coping mechanisms that they may choose to employ.

Broidy and Agnew (1997) attempted to utilize General Strain Theory while discussing the differences between males and females in regard to delinquency. The researchers set out to examine how General Strain Theory could answer the two major questions regarding female criminality, how do we explain the higher rates of crime among males, and how can we explain why females engage in crime (Broidy & Agnew, 1997).

While examining the research regarding strain and gender differences, Broidy and Agnew (1997) identified three ways in which General Strain Theory might explain these gender differences. First, Broidy and Agnew stated that males and females experience different types of strain, with male strain being more conducive to violent and property crime and female strain being conducive to self-directed crime and family violence. Second, males and females differ in the emotional responses they experience as a result of strain. Males and females may both experience anger in response to strain, however, females are more likely to internalize the strain, leading to feelings such as depression, guilt or anxiety (Broidy & Agnew, 1997). Third, Broidy and Agnew identified that males are more likely to respond to strain with serious crime due to differences in factors such as coping mechanisms, social support and opportunities.

Broidy and Agnew (1997) go on to discuss the specific types of strain that females might experience based on the stress/anxiety and feminist literature in regard to the specific types of strain outlined by the theory. Though they provide no empirical evidence for their information, Broidy and Agnew developed an important structure on which future articles regarding gender and General Strain Theory have built.

DeCoster (2010) furthered the work of Broidy and Agnew (1997) regarding general strain and gender. The authors hypothesized that female anger would be more likely to be accompanied by depression than anger, males are more likely to respond to anger with delinquency, and males are more likely to respond to depression with delinquency (DeCoster, 2010). DeCoster utilized a sample of 385 six, seventh and eighth graders. Overall, the study found support for the main components of general strain theory. Stress was found to be associated with delinquency in both male and female adolescents with negative emotions such as anger and depression facilitating the relationship between stress and delinquency (DeCoster, 2010). The authors also identified that anger in female adolescents is often combined with feelings of depression more so than in male adolescents. (DeCoster, 2010).

Higgins, Piquero and Piquero (2011) also utilized the work of Broidy and Agnew (1997) to test General Strain Theory, however, the authors utilized a sample of children and adolescents for their study. The researchers found support for Broidy and Agnew's hypothesis that males and females would experience different types of strain and would respond to these levels of strain differently (Higgins et al., 2011). For example, Higgins et al. determined that the relationship between peer rejection and delinquency differed by gender, with a stronger relationship in the male sample than in the female sample. Also, a male whom is a member of the highest peer-rejection group has an increased likelihood of belonging to the highest delinquency group as well (Higgins et al., 2011).

General Strain Theory and College Students

Though originally developed with early adolescents in mind (Agnew, 1992), General Strain Theory had been successfully adapted to help examine late adolescent (Aseltine et al., 2000) as well as adult criminality (Burton et al., 1994; Listwan, Sullivan, Agnew, Cullen &

Colvin, 2013). Please refer to Table 2 for a list of studies that have utilized a late adolescent or adult sample while testing General Strain Theory.

Several studies have utilized General Strain Theory as a tool to specifically describe criminality in the college years. Moon, Hays, and Blurton (2009) conducted a test of General Strain Theory utilizing 294 undergraduate students. The authors examined strains such as emotional punishment from teachers and race/gender discrimination on the college campus (Moon et al., 2009). Emotional punishment from teachers measured the extent to which students felt isolated, embarrassed or ignored by teachers (Moon et al., 2009). Moon et al. identified that students who experienced emotional punishment from teachers, racial discrimination or goal blockage were more likely to engage in deviant behavior. Contrary to other studies (Aseltine et al., 2000; Hoffman & Miller, 1998), as well as predictions made by Agnew (2001), Moon et al. did not find a significant relationship between family related strains and deviance. The authors stated that this could be due to the age of the individuals and their maturity in regard to family conflict and parental punishment (Moon et al., 2009).

Smith, Langenbacher, Kudlac, and Fera (2013) also conducted a test of General Strain Theory utilizing college undergraduate students in the United States. This study examined the presence of academic stressors and how these stressors impacted the delinquent behavior of 500 undergraduate students (Smith et al., 2013). The authors measured strain variables, as indicated by Agnew (1992), and also measured cumulative stress.

Table 2

Studies That Utilize a Late Adolescent or Adult Sample

Year	Author	Sample	Method	Strain Variables	Results
1994	Burton, V., Cullen, F., Evans, T. and Dunaway, R.	555 adults from a midwestern area	Questionnaire	Economic aspirations/expectations, perception of blocked economic opportunities, relative deprivation, crime	No strain variable significantly affected criminality. General Strain Theory does not explain criminal behavior as well as other criminological theories.
2000	Aseltine, R., Gore, S., and Gordon, J.	1,208 adolescents and young adults residing in the greater metropolitan area	Interviews	Delinquency and drug use, aggression, family and peer relationship stresses, negative personal experiences, life stresses, family conflict, peer conflict, anxiety, control and personal efficacy, family attachment, exposure to delinquent peers	Limited support for general strain theory, negative life events and conflict with family members significantly and positively related to deviance
2001	Broidy, L.	896 undergraduate students at a northwestern university in the United States	Survey	Failure to achieve positively valued goals, loss of positively valued stimuli, presentation of negative stimuli, negative	Lack of success at reaching one's goals reduces the likelihood that individuals respond to strain with anger. Stressful life events increase strain-induced anger. Strain-

				emotions, legitimate coping strategies, illegitimate/criminal outcomes	induced anger significantly increases the likelihood of illegitimate outcomes.
2003	Mazerolle, P., Piquero, A. and Capowich, G.	338 undergraduate students located in the western United States	Questionnaires	Intentions to commit crime, situational anger, trait anger, prior behavior, moral beliefs	Experiencing strain at school influences negative emotions such as situational anger as well as behavioral intentions to deviate. Feelings of inequity may generate intense feelings of anger related to one's sense of unfairness. Anger is a critical influence in the explanation of crime and deviance.
2008	Ford, J. and Schroeder, R.	Harvard School of Public Health's College Alcohol Study, 14,000 students	Original data secured through surveys	Academic strain, negative affective state, crime	Academic strain is significantly associated with non-medical use of stimulants, academic strain is significantly associated with depression.
2009	Brougham, R., Zail, C., Mendoza, C. and Miller, J.	166 college students (70 men and 96 women) at a liberal arts university in California	Interviews and questionnaires	Coping responses to stress, stress assessment, employment status, crime	Women reported higher levels of stress, greater stress for familial relationships, social relationships and daily hassles and greater use of overall self-help and approach to cope with stress. College men reported using self-help to cope

					with social stress
2009	Moon, B., Hays, K., and Blurton, D.	294 university students in the western United States enrolled in freshmen-level courses	Questionnaires	Desired goal blockage, family conflict, parental punishment, teachers' emotional punishment, gender discrimination, race discrimination, criminal victimization, negative community environment, negative emotional, deviant behavior	Students who experienced desired goal blockage, teachers' emotional punishment, or racial discrimination were likely to engage in deviance. Family related strains and gender discrimination were not significantly related to deviance. Students experiencing racial discrimination were more likely to engage in violent deviant behavior.
2013	Smith, T., Langenbacher, M., Kudlac, C., and Fera, A.	461 undergraduate students at a private college	Questionnaires	Blockage of positively valued goals, presence of negatively valued stimuli, removal of positively valued stimuli, cumulative stress, academic dishonesty	Personal academic shortcomings increase cheating behaviors. Frustration due to blocked goals and cumulative stress significantly predicted exam cheating and plagiarism.

Blockage of positively valued goals was measured to address perceived academic shortcomings, with items such as “I am a poor test-taker” (Smith et al., 2013). Smith et al. measured perceived injustice felt by the individual by questioning them on the fairness of cheating on tests and how they felt about students who cheated and earned high grades (Smith et al., 2013). In order to measure the presence of a negatively valued stimuli, the authors questioned the respondents concerning whether they had ever experienced sanctions, such as academic probation, while in college (Smith et al., 2013). The measurement of removal of positively valued stimuli dealt with losing scholarships or athletic eligibility due to poor academic performance (Smith et al., 2013). The dependent variable in this study, academic dishonesty, was measured in a self-report manner.

Smith et al. (2013) provided partial support for General Strain Theory in regard to academic stressors leading to delinquent or criminal behavior. Specifically, academic shortcomings, measured on a scale, led to an increase in delinquent behavior (cheating) (Smith et al., 2013). According to the authors, frustration that is related to the blockage of goals and cumulative stressors predicted academic dishonesty, such as cheating and plagiarism (Smith et al., 2013).

Though not tested on college students, Higgins et al. (2011) examined the role that peer rejection had on delinquency and criminal behavior. Several factors were found to increase the amount of strain that the individual experiences, these are; peer group size, contact with individuals of the opposite sex, and level, frequency and duration of the association (Higgins et al., 2011). While this research was conducted on children and young adolescents, it does provide insightful information regarding the potential role that peer influence could have on delinquency and crime for college students.

Emerging Adulthood and the College Experience

The period of time that spans from the late teen years through the mid-twenties has been referred to in research as emerging adulthood (Arnett, 2000). This period of time is characterized by young adults seeking to gain independence and gather information about potential future pursuits and options for their adult life (Arnett, 2000; Arnett, 2007). A defining feature of this time period is the opportunity for identity exploration through life experiences (Arnett, 2007). This time period often consists of academic pursuits as well as changes in areas such as relationships, employment and world-views (Arnett, 2000).

As mentioned, one of the most important factors of emerging adulthood for American youth is the pursuit of higher education (White, McMorris, Catalano, Fleming, Haggerty & Abbott, 2006). Young adults entering college for the first time experience many changes over a relatively short period of time, experiencing a high level of demographic diversity and instability (Arnett, 2000). This often starts with the separation from one's support group of family and friends for the first time.

This initial separation from family is often seen as a necessary component of the maturity process, designed to promote independence in the young adult (Rice, Cole & Lapsley, 1990). In fact, separation from family and peers during emerging adulthood has shown to be beneficial for personal and social adjustment (Crede & Niehorster, 2012). Some studies of crime in the college years have determined that emotional and physical distance from family had little effect on crime (Froggio & Agnew, 2007; Moon et al., 2009).

However, this process of maturity may also present a weakening of parental monitoring, which can lead to increased delinquency (White et al., 2006), which will be discussed later in this dissertation. The outcome of the separation from parents and other support groups depends

on the feelings the individual has concerning the separation (Rice et al., 1990). Research conducted by Rice and colleagues (1990) determined that students who reported positive feelings concerning the separation appeared more well-adjusted to the university life, conversely, those who had negative or angry feelings about the separation had difficulty managing their adjustment to college without their support group.

Negative or angry feelings concerning the separation from friends and family in addition to adapting to the new roles and responsibilities that first year students are faced with, can lead to poor adjustment to college life (Crede & Niehorster, 2012). Crede and Niehorster further explain that poor adjustment to college life can be linked to criminal or deviant behavior, specifically, underage drinking and other “academic” deviances such as cheating.

It is not only the separation from family that leads to stress for college students. Ross, Niebling and Heckert (1999) conducted a study with 100 undergraduate students in which they examined sources of stress among college students. The results of this study determined that the top five stressors for college students were: changes in sleeping habits, vacations/breaks, changes in eating habits, increased work load, and new responsibilities. All of these stressors occur for undergraduate students during their very first semester of school.

The stressors that college freshmen experience have been linked to specific types of strain, as identified by Agnew (1992). Ford and Schroeder (2008) examined the different types of strain and determined which college situations, stressors, and experiences would fit the criteria Agnew specified regarding the types of strain. According to the authors, the loss of something positive might include poor grades, loss of scholarship funding, negative encounters with peers or faculty and discrimination. Examples of noxious or negative life events that could occur include poor physical conditions, physical or verbal abuse by peers and overly harsh faculty

(Ford and Schroeder, 2008). At this point, young adults have the option to cope with the life events that they are experiencing, or engage in risky behaviors to decrease the strain that they are feeling as a result of these events (Agnew, 1992).

Many risky behaviors, such as drinking, illegal drug use and risky sexual behavior, reach their peak during emerging adulthood (Arnett, 2000). This behavior, sometimes seen as part of the individual's identity exploration (Arnett, 2000), can cause social, emotional and/or legal problems for the individual.

A study conducted by White et al. (2006) examined the risky alcohol and marijuana use during emerging adulthood for college students. The authors determined that the increases in alcohol and drug use associated with this time period were connected with students who lived in the dormitories or other housing shared with young adults (White et al., 2006). Heavy drinking was associated with students who did not live with their parents, students who did live with their parents reported the lowest rates of drinking and marijuana use (White et al., 2006).

The results of the study conducted by White and colleagues (2006) found that moving away from one's home and support system were significantly related to increases in alcohol use, however, this factor was not associated with increases in marijuana use. White et al. related this increase in risky behaviors to the increase in freedom and decrease in responsibility and social control.

While coping with the strains and pressures of attending college and moving away from one's support group, individuals in emerging adulthood must also attempt to make major life decisions regarding things such as employment, relationships and future pursuits (Arnett, 2007). This period of goal setting can be difficult for these individuals based on their ability, or inability to set realistic and achievable goals (Arnett, 2007).

Research conducted by Arnett (2007) suggests that emerging adults tend to have high expectations regarding things such as relationships, education and employment. Arnett goes on to state that an inability to reach these high expectations could be difficult for these individuals to cope with. Shulman and Nurmi (2010) provide support for Arnett's ideas, stating that the failure to attain these goals could lead to the need to adjust one's expectations, which could then lead to increases in strain and pressure.

In sum, individuals attending college for the first time during this pivotal time period in their lives often experience strain in regard to their adjustment (Dyson & Renk, 2006). They are required to become accustomed to a different social environment, adapt to their new roles and responsibilities, cope with the separation from their family and friends and also make crucial decisions regarding their future (Crede & Niehorster, 2012). When individuals are presented with these challenges, they are required to rely on the coping mechanisms that they have developed throughout their lives (Dyson & Renk, 2006). If they are unable to cope utilizing pro-social, appropriate coping mechanisms, deviant and/or criminal behavior may occur.

Purpose of the Present Research

The purpose of this dissertation is to utilize General Strain Theory, as described by Agnew (1992, 2001), to examine the amount of strain the college freshmen experience during their first semester. The strain and pressure that the individuals experience (Dyson & Renk, 2006; Ross et al., 1999) will be assessed in regard to the coping mechanisms the individual chooses to utilize, which will result in either appropriately coping with the stressor or committing a deviant and/or criminal act. Specifically, drug and alcohol use as well as academic dishonesty will be measured as variables related to delinquent coping, as discussed above. This

dissertation will also examine whether factors such as the student attending a commuter or residential college campus impacts the strain that they experience.

CHAPTER THREE

METHODS

Introduction

This study was designed to examine propositions and variables from Agnew's General Strain Theory (1992, 2001). This theory specifies that criminal behavior will result from individuals experiencing strain in their lives and not coping appropriately with the situations that present themselves (Agnew, 2001). Variables such as distance from home, availability of a support group, and extracurricular activities were examined along with the strain variables. This study utilized modified variables from existing scales that test General Strain Theory. Specific information regarding these scales is discussed below.

In order to reduce measurement error, the survey instrument was reviewed by a convenience sample of college students. This allowed the researcher to determine if any question wording should be changed to increase the clarity of the instrument. This also provided the researcher with valuable information regarding the content and the length of the survey instrument. Individuals who participated in the review were informed that they should comment on the set-up and wording of the questions only, and that responses were not necessary for the actual survey questions. Based on the result of the review, question wording and survey format were changed for clarity and to increase the ease of response.

Research Questions and Hypotheses

It was hypothesized that there will be differences in the freshmen populations at the commuter university and at the residential university. Freshmen students who live on campus will have different experiences and different amounts and types of strain than freshmen who live off of campus. As a result of the differences in the amount and type of strain that they

experience, there will be differences in criminal, delinquent, or deviant behavioral responses to strain.

I. Students who live on campus will experience more strain than those who commute to campus. As a result, they will commit more criminal, delinquent, or deviant acts.

This hypothesis is based on the literature regarding the changes in support groups that can take place during emerging adulthood when individuals move away from their family and friends (Arnett, 2000). According to White et al. (2006), this separation from family and friends can lead to increases in criminal and delinquent behavior due to a lack of parental and social monitoring.

This time period is also difficult for individuals to adjust to due to changes in areas such as sleeping habits, vacation/break time, eating habits, increased work load, and the presence of new responsibilities (Ross et al., 1999).

II. Students at both universities who are involved in university life (student organizations, intercollegiate sports) will experience less strain than those who are uninvolved. Due to this involvement and they support it provides, these students will commit fewer criminal, delinquent, or deviant acts.

If an individual is able to form a support group at the university that they chose to attend, it is hypothesized that this individual will experience less strain than those who are unable to form a new support group. Support groups allow individuals to have access to different levels of coping mechanisms, which can reduce the amount of strain that they experience and make that strain less likely to lead to criminal or delinquent behavior (Agnew, 1992).

Individuals who are involved in extracurricular activities and groups at their university are also less likely to feel isolated from their peers and surrounding adults. Feeling isolated from

support groups, peers, and adults in a social network has been linked to feelings of strain (Moon et al., 2009).

III. Individuals who score higher on the self-esteem scale will commit less deviant, criminal, or delinquent acts in response to strain.

Self-esteem has been measured in many studies of General Strain Theory. Agnew (1992) identified that the presence of self-esteem makes individuals more resistant to strains that they experience and also reduces the chances of the individual responding to the strain with deviant or criminal behavior.

Setting of the Study

This research examined students from two different universities. These two universities were chosen based on their comparable student population and the characteristics that they possess in regard to the present study, which will be discussed below. Prior to describing the university characteristics in detail, some information about the geographical location is necessary.

According to the 2012 U.S. Census, the commuter university is in a location that has a population of 65,000. This population is approximately 50% white or Caucasian and 50% black or African American (2012 U.S. Census). Within the population, approximately 11% have earned a bachelor's degree or higher, and the median household income is approximately \$24,000 (2012 U.S. Census).

In comparison, the residential university is comprised of approximately 13,000 individuals (2012 U.S. Census). This number, much smaller than that of the commuter location, doubles in number when school is in session. The population in this location consists of approximately 90% white or Caucasian and 7% black or African American (2012 U.S. Census).

Approximately 41% of the population has earned a bachelor's degree or higher, and the median household income is approximately \$28,000 (2012 U.S. Census).

Examining a university where the majority of freshmen students are required to live on campus and comparing that university to a mostly commuter campus will determine if there are differences between the individuals at each university and in the level of strain that they experience. The following table gives specific information regarding the undergraduate student body at both universities. The information presented was found on the US News website concerning college rankings and reviews and was updated in 2012 (www.colleges.usnews.rankingsandreviews.com).

Table 3

University Characteristics

	Commuter University	Residential University
Total Undergraduate Population	12,644	13,058
Male (%)	48	45
Minority Students (%)	21	13
International Students (%)	1	4.3
Living on Campus (%)	6.6	29
Fraternity Membership (%)	1	6
Sorority Membership (%)	1	6

As shown in Table 3, the universities are comparable in the total undergraduate population with less than 500 students separating the universities. The universities are also comparable in the gender distribution, with similar percentages of male and female students. Due to the proposed current research, the main criterion that indicates that these two universities are appropriate for the setting is the percentage of students living on campus. As evident in Table 3, approximately 7 percent of students at the commuter campus live on campus while approximately 30 percent of students at the residential campus live on campus. The differences

that do exist within the universities, the number of minority and international students as well as the number of students who participate in Greek organizations, could have an impact on the overall study. However, given the small percentage of students involved in these groups and given that students at the residential university may not join a Greek organization until they complete 12 credits, this difference should not present a problem with the current research study as the survey instrument was administered during the first semester of the students' freshmen year.

A difference could be expected regarding the number of international students at each university; however, due to the relatively small percentage at each university, the total sample is not expected to have a significant percentage of international students.

Sampling Technique

In order to obtain the sample necessary for this study, the researcher identified undergraduate students who fit the specified criteria from each university. Upon IRB approval, lists of all incoming freshmen at each university were gathered to use as part of the sample. In order to obtain a list of all undergraduate students at the residential campus, the on-campus research lab was contacted for assistance. Upon contacting the research lab, the researcher received an email list of all first year undergraduate students who met the identified criteria.

A much similar process was used at the commuter campus to gather information regarding the sample; however, this university does not have a research lab to provide this information. The university Registrar provided this researcher with access to the email addresses of all incoming freshmen upon IRB recognition. This list does not contain any identifying information, so the individuals who receive the survey instrument will remain anonymous.

Sample Size

This study utilized Cohen's (1992) Power Primer analysis to determine the appropriate sample size needed for the research. The model that this research will utilize contains twenty-one (21) independent and control variables related to the respondents. These variables are either measured continuously or as "dummy" variables. The model also contains five (5) dependent variables that are measured using scales. Additionally, measures of self-control and differential association-reinforcement have been added to the model based on Agnew's (1992) recommendations for a full test of General Strain Theory.

The level of significance preferred by this researcher is .05. According to Cohen (1992), a study utilizing the factors mentioned above would need to include a sample size of at least 172 in order to obtain the expected medium effect size. All of the incoming freshmen students from each university will be emailed the survey instrument to obtain the largest sample size possible. This will help to reduce forms of error within the study. Based on information collected for the 2012-2013 school year, the residential university had a total of 2,741 new freshmen students (Institutional Fact Book). Similarly, the commuter campus had 2,736 new freshmen students during the 2012-2013 school year (Weimer, 2013). An approximate response rate of 10-25% can be expected for more in-depth research such as this (Sauermann & Roach, 2013). By utilizing the entire population of freshmen students, the researcher was able to ensure that a sufficient sample size was reached.

Design of the Study

This study utilized cross-sectional analysis. This specific design allowed the study to examine a large sample of respondents and their opinions regarding the strain variables at one point in time. Cross-sectional analysis is the best type of analysis for this dissertation because

continued access to the sample would be difficult and time consuming to maintain as well as costly. In addition, the researcher was not attempting to examine causality or changes in relationships over time, so continued access is not necessary for this research.

Survey Methodology

The survey methodology has been utilized in the majority of the research regarding General Strain Theory tested on samples of college students and young adults (Broidy, 2001; Burton et al., 1994; Mazerolle et al., 2000; Smith et al., 2013). This method is very useful for this type of research because the researcher was able to extract data from a relatively large sample in a timely and cost effective manner. It is also useful for the present research because many of the variables required concern demographic factors, which were easily provided using the survey methodology.

Specifically, an online survey instrument was utilized with this dissertation. Online survey instruments have historically relatively low response rates due to factors such as limited access to the internet and large influxes of mail (Dillman, 2009). However, online surveys are preferred with the present study due to the nature of the population. Undergraduate students are required by the university to have an email address associated with the university. They are also instructed to check their email regularly due to important information being provided in this manner. This method was also preferred for the present study because it allowed for a larger sample to receive the survey instrument in a timely and cost effective manner.

This research utilized components of Dillman's (2009) tailored design method. This method uses motivation techniques to encourage a high quality and quantity of responses (Dillman, 2009). By utilizing this approach, the research attempted to limit sources of error for

the survey methodology. The Dillman method will be discussed further examining the administration of the survey instrument.

Variables and Measures

Personal characteristics were measured on the survey instrument in either a multiple-choice format or as “dummy” variables. These characteristics included items such as gender, race, employment status, hometown location, scholarships/grants, involvement in intercollegiate sports or extracurricular activities, number of school hours, and high school grade point average. Individuals are also asked to identify the university that they attend, their academic year, and their college major to ensure that they meet the required criteria. Should a survey instrument be sent to an individual who is not a first semester freshmen, the survey responses were not included in the result of this dissertation.

The majority of the questions in the last part of the survey instrument (see Appendix D) measured demographics and descriptive variables. However, certain variables were examined in combination with the strain variables.

College Major

Individuals were asked to identify their college major and were given the following choices; criminology/criminal justice, nursing, education, or other. The specific majors, criminology/criminal justice, nursing, and education, were chosen by the researcher due to the professional requirements these majors have for individuals employed in these professions upon graduation. For most criminal justice/criminology, nursing, and education careers, individuals are encouraged and sometimes expected to not have any criminal background. This factor, which students are informed of when they choose their major in most cases, could have an impact on their decision to engage in substance abuse or academic dishonesty.

Employment Status

The responses for this question include: full time, part time and not employed.

Comparisons will be made between the categories to determine if there are differences based on employment status. Individuals who are employed either part time or full time will have less time to spend on their schoolwork, which could lead to greater sources of strain for the individual.

Hometown Location

The survey instrument asked several questions to determine an individual's connectedness to their hometown and family support group. Specifically, the first question in this section asked how far away an individual's permanent address is. This is measured in options such as; less than one hour, 1-2 hours, or over two hours. The second question concerning student's connectedness to their hometown and family asked if the students live in student housing on campus. If respondents indicate that they do not live at home, they were asked how often in the last 30 days they have communicated with their family through phone call, text message, or skype/video technology.

Students who live closer to their "hometown" or where they lived prior to attending college might have a closer connection to their support group, which could include more frequent trips to visit these individuals. These questions also aimed to determine how often student are in contact with their family or support group if they do not live at home. If students are able to maintain the connection with their support group while living away from home they could be less likely to experience certain forms of strain.

Scholarships/Grants

This question determined if individuals who have scholarship or grants experience different levels of strain than those who do not. Students who have scholarships or grants might

experience less strain than those who do not due to having assistance with tuition, fees, and/or books. However, those that have scholarships or grants could also experience more strain due to the necessity to maintain a certain grade point average or take a certain number of course hours.

Federal or Personal Loans

Similarly to the variable above, this question attempted to measure if students who are receiving federal or personal loans experience different levels of strain than those that do not.

Financial Assistance from Parents/Guardians

This question once again questioned financial strain that the individual may experience. Those who receive financial assistance from their parents/guardians may experience different levels and types of strain than those who do not.

Involvement in Intercollegiate Sports or Extracurricular Activities

Similar to employment, involvement in intercollegiate sports could be a source of additional strain for students depending on the availability of their coping mechanisms. Conversely, involvement in intercollegiate sports could provide additional sources of support for the student, which might decrease their levels of strain and increase their coping mechanisms.

Extracurricular activities could provide additional sources of strain for individuals due to the time commitment. However, these activities could also allow individuals to form vital support networks outside of their family, which could lead to decreased levels of strain.

School Hours

This question measured the number of credits the student is registered for during the fall semester of their freshmen year. This determined if there were differences in amount and type of strain that individuals experience based on the number of classes they are taking each semester.

High School Grade Point Average

This question determined the grade point of the individual upon their high school graduation. Research indicates that students who have higher grade point averages will be able to become better adjusted to university life than those with lower grade point averages (Crede and Niehorster, 2012).

Family Background Scale

This 12-item scale was developed off of a scale created by Broidy (2001) to measure the emotional and disciplinary background of the respondents. According to Agnew (1992), these factors will impact levels of strain, the development of coping mechanisms, as well as deviant and/or criminal behavior. The original scale consisted of items examining the background of the respondent, however, they have been adapted to examine the current state of the respondent's family ties. Individuals were presented with statements concerning their connectedness and association with their family and their family's response to their behavior. Responses include strongly agree, agree, disagree, and strongly disagree.

In addition, questions concerning family background have been added to the demographic section of the survey instrument, as discussed above. These questions examined how often students who do not live at home visit their family in the last 30 days and how often they communicated with their family members through phone calls, text messages, or Skype/other video technology.

Rosenberg's Self-Esteem Scale

Rosenberg's Self-Esteem Scale (1979) was included in the measure to examine the individual's level of self-esteem and how this could relate to strain and deviant and/or criminal behavior. Agnew (1992) identified that individuals who are high in self-esteem are more resistant

to strain and have a reduced likelihood of responding to strain with deviance and/or criminal behavior.

This scale has been utilized in many research projects since its development. Test-retest reliability of this scale identified a score of .85 and .88. This measure also demonstrates concurrent, predictive, and construct validity (Rosenberg, 1979).

Substance Use

This four item measure was developed to identify the substance abuse of the respondent. The students will be queried about their usage of marijuana, alcohol, and prescription medication not prescribed to them. It is a measure of deviant/criminal behavior as well as of deviant coping mechanisms to strain. Individuals were asked to respond to the measure based on the last 30 days and to indicate a ratio level answer. Higher scores on this measure indicated greater involvement in substance abuse.

Academic Honesty Scale

This four item measure was created to determine the academic honesty of the respondent. This measure determined if the individual has committed acts of academic dishonesty within the last 30 days. Individuals were asked to respond to the measure with a ratio level answer. Higher scores on this measure indicated greater academic dishonesty.

Strain Variables

Legitimate Coping Strategies

The Legitimate Coping Strategies measure utilized in this study was adapted from Broidy's (2001) study on General Strain Theory. This measure of legitimate coping asked individuals to rate their responses when they are "unable to reach a certain goal" and "when bad things happen". There are twelve items under each category and the respondents will determine if they never (0), rarely (1), sometimes (2), or always (3) respond in a certain way. Higher scores

on this scale indicated higher levels of legitimate coping in response to strain. This scale has a Cronbach's alpha of .71.

Stressful Life Events

This measure, also adapted from Broidy (2001), measured the stressful life events, such as "Failing an exam or quiz", "Being fired from a job", and "Being the victim of a crime", that participants have experienced. According to Broidy, this 18-item list of stressful life events is particularly relevant for a sample of young adults. Respondents were instructed to complete this section of the survey instrument based on their entire life experiences and to determine how often they had experienced each event on the list. The response categories are as follows; never (0), once (1), two to three times (2), or four or more times (3). A higher score on this scale indicates that the respondent has experienced higher amounts of stressful live events. This scale has a Cronbach's alpha of .76.

Negative Emotionality/Negative Affective State

Broidy (2001) created this measure to determine the respondent's use of anger and other negative emotions. Specifically, respondents are asked to identify how often they experience a specific feeling, such as angry, cheated, and overwhelmed, when they are unable to reach their goals. This measure was developed to determine the types of negative affective states, such as anger, depression, or anxiety, which individuals are most likely to develop in response to different types of strain (Broidy, 2001). Response categories for this measure include; always (3), sometimes (2), rarely (1), and never (0). Higher scores on this measure indicated greater negative affective state. This item has a Cronbach's alpha level of .89.

Failure to Achieve Positively Valued Goals

This 4-item measure was developed to determine how successful individual's feel they have been in regard to several areas of their lives. These included; academic, social, relationship, and health/wellness. Response categories include; not at all (0), somewhat (1), Successful (2), and very successful (3), with higher scores on this measure indicating higher goal achievement.

Additional Variables

In order to conduct a full test of general strain theory, Agnew (1992) identifies that the assessment should include measures of Self-Control (Gottfredson & Hirschi, 1990) as well as Differential Association-Reinforcement theory (Burgess & Akers, 1966). A full test of each additional theory is outside the scope of this research; however, these variables could provide valuable information to be examined at a later date. Self-control and Differential Association-Reinforcement variables will not be analyzed for the purposes of this dissertation.

Self-Control Variables

The General Theory of Crime (Gottfredson & Hirschi, 1990) was developed to explain why individuals do not choose to commit crimes. The theory proposes that individuals who are high in self-control will be less likely to engage in criminal behavior at all points in their lives (Gottfredson & Hirschi, 1990). Gottfredson & Hirschi predict that ineffective or incomplete parental management will lead to the development of low self-control, which will then lead to criminal behavior. This research proposes to examine the levels of self-control present within the sample of first semester college students.

A measure of self-control was added to the present survey instrument to determine how this variable could impact criminal, delinquent, or deviant behavior. This measure was first utilized by Burton, Evans, Cullen, Olivares & Dunaway (1999) and attempts to determine the

level of self-control that the respondent has. Response categories for this measure included; strongly agree (0), agree (1), disagree (2), and strongly disagree (3). When necessary, items were recoded so that higher scores indicate lower levels of self-control. This measure has an alpha level of .64 (Burton et al., 1999).

Differential Association-Reinforcement Variables

Differential Association-Reinforcement theory, as developed by Burgess and Akers (1966), suggests that deviant, criminal or delinquent behavior is learned through associations with peers and is much the same as learning any other behavior. Burgess and Akers identified that individuals who have an excess of definitions favorable to law violation will be more likely to commit such acts. This means that individuals who have beliefs that support the use of deviant, criminal or delinquent behavior will be more likely to actually commit the acts than those who do not. In addition, Burgess and Akers identified that the presence of delinquent peers impacted deviant, criminal or delinquent behavior due to the learning that takes place in peer groups.

Two measures of Differential Association-Reinforcement have been added to this research. Specifically, these measures examined internal criminal values (definitions favorable to law violation) and number of criminal friends. This measure was developed by Evans, Cullen, Burton, Dunaway, and Benson (1997). To measure internal criminal values, respondents were asked how much they agreed or disagreed with statements concerning criminal behavior. Response categories include; strongly agree (0), agree (1), disagree (2), and strongly disagree (3). When necessary, items were reverse-coded so that higher scores on this measure indicated higher levels of criminal internal values.

To measure number of criminal friends, respondents were asked how many of their friends have done something they could have been arrested for. Response categories include; none (0), 1-2 (1), 3-4 (2), and 5 or more (3). Higher scores on this measure indicate higher number of criminal friends.

Administration of the Survey

The survey instrument (see Appendix D) was administered to a sample of freshmen students at two separate universities. The survey instrument was created utilizing the Qualtrics software program, this program allows for the creation, distribution and assessment of web-based surveys. Upon IRB approval, the survey instrument was sent out via email to the students selected from both universities. The sample (n=4,322) was sent the survey instrument as a link in an email format coming from the researcher's personal email address. This was done to limit the extent to which emails would be sent to junk or spam mailboxes. Mailing out the large quantity of emails including the link to the survey instruments directly from Qualtrics would increase the chances of this occurring. As per the Dillman (2009) tailored design method, the survey instrument was mailed out on a Monday morning prior to work hours. This email also introduced the respondents to the researcher and provided some background information on the research project. The individual receiving the email were then asked to complete the survey instrument, which should take approximately 15-20 minutes of their time.

As recommended by Dillman (2009), a token of appreciation was offered to the respondents. After completing the survey instrument, the respondents were instructed to follow an emailed link to a second survey instrument if they would like to be entered in the drawing for the token. Four gift-cards in the amount of \$20 were available for the respondents to win should they choose to complete the survey instrument. Due to this second survey instrument being

completely separate from the original, it is not possible to connect the personal information the respondents provide with their survey responses. Upon receiving the completed survey instruments, two students from each location were randomly chosen to receive the gift-cards. This technique has been shown to increase response rate as predicted by the Tailored Design Method (Dillman, 2009).

Approximately one week after the initial mailing, a second email was sent to those that had yet to respond to the survey instrument. According to Dillman (2009), this technique will increase the chances of respondents completing the survey instrument.

Method of Data Analysis

Due to the nature of the variables in this study, several statistical analyses were utilized to assist with answering the research questions. Upon gathering the data, the researcher examined the surveys to determine if there was missing information. Individuals who have skipped questions were included in the analysis, however, individuals who stop taking the survey were not. Surveys in which the individual has stopped answering questions were considered as withdrawing consent.

After examining the data for missing information, SPSS was used to assess the demographic variables. The Cronbach's Alpha (Cronbach, 1951) levels of the scales used for this study were also determined. Cronbach's Alpha is a measure of internal consistency that was used to determine the reliability of the scales utilized (Carmines & Zeller, 1979). Once the Alpha levels of all the scales used was determined, the researcher compared this to the Alpha level of studies that have previously utilized the scales.

For the majority of the analyses, multiple regression was used. This allowed for the inclusion of theoretically relevant predictive variables to explain a relationship within the model. Below, the hypotheses for this study are discussed in regard to their proposed statistical analysis.

I. Students who live on campus will experience more strain than those who commute to campus. As a result, they will commit more criminal, delinquent, or deviant acts.

Multiple regression analysis was used to examine Hypothesis 1. This assessed the relationship between living on campus, the dependent variable, and several types of strain, the independent variables.

II. Students at both universities who are involved in university life (student organizations, intercollegiate sports) will experience less strain than those who are uninvolved. Due to this involvement and they support it provides, these students will commit fewer criminal, delinquent, or deviant acts.

Multiple regression was also used to examine Hypothesis 2. For this hypothesis, the variables “Intercollegiate Sports” and “Extracurricular Activities” were collapsed to form one variable, “University Involvement”. Once this was completed, the relationship between this new variable, “University Involvement” and the different types of strains that have been measured was determined.

III. Individuals who score higher on the self-esteem scale will commit less deviant, criminal, or delinquent acts in response to strain.

For this hypothesis, the relationship between the variable “Self-Esteem” and the measures of drug and alcohol use as well as academic dishonesty was examined. This allowed the researcher to determine if self-esteem impacted frequency of substance abuse and academic dishonesty.

CHAPTER FOUR

RESULTS

Introduction

This chapter will discuss the analyses that were conducted in the current study and present the results. First, survey statistics are presented to provide information regarding the total number of completed surveys as well as incomplete surveys that have been dropped from the present evaluation. Second, frequencies and demographics will be provided concerning the variables in the present study. Next, variables relevant to General Strain Theory will be discussed. Then, the bivariate correlations for the independent and dependent variables are provided. Information regarding the scales and indices is then discussed. Finally, the results of the multivariate analyses are provided and discussed.

Survey Statistics

Eight hundred and two (802) total surveys were completed on the Qualtrics software. This includes 344 from the commuter campus (43%) as well as 458 from the residential campus (57%). This results in a 20% response rate for the commuter university and a 17% response rate for the residential campus. After examining the surveys, 201 were not included in the analysis due to the respondent not completing the survey instrument. As previously mentioned, if respondents stopped taking the survey it was assumed that they were withdrawing their consent. In addition, 19 individuals indicated that they were under the age of 18 and 6 indicated that they were not freshmen students. Based on these reasons, these individuals were not included in the analysis either. This resulted in a total of 576 completed survey instruments included in the analysis.

Demographic Variables

The total sample consisted of 66.2% female respondents (n=382) of which 40 % were from the commuter university (n=153) and 60% were from the residential university (n=229). The majority of respondents, 80.6%, identified that they were 18 years of age and the mean age of the respondents was 18.4.

The majority of total sample indicated that they were Caucasian (83.9%, n=484). Relatively low percentages were reported for African American (7.1%, n=41) and Other (8.3%, n=48). As mentioned previously, one's major was a variable of interest as it was hypothesized that students in certain majors may have difficulty securing jobs in their discipline if they engage in certain behaviors and are disciplined as a result. When examining this variable, 9.2% (n=53) reported that they were Nursing majors, 10.1% (n=58) reported that they were Education majors, and 6.8% (n=39) indicated that they were Criminology/Criminal Justice majors. This resulted in 73.5% (n=424) of students who indicated that they were not Nursing, Education, or Criminology/Criminal Justice majors and identified with the category of Other. As evident in the table below, some respondents did not provide answers to demographic variables. Please refer to Table 4 for more information on the demographic variables.

Table 4

Frequencies and Percentages for Demographic Variables- Total Respondents

<u>Variable</u>	<u>Valid n</u>	<u>Valid %</u>
Gender		
Male	190	32.9
Female	382	66.2
Age		
18	465	80.6
19	81	14
>19	28	5.4
Race		
African American	41	7.1
Caucasian	484	83.9
Other	48	8.3
College Major		
Nursing	53	9.2
Education	58	10.1
Criminology/Criminal Justice	39	6.8
Other	424	73.5

Strain Related Variables

This study examined many variables that were expected to have an impact on total strain, they include college major, employment status, distance from permanent address, financial status (e.g. having scholarship/grants, having loans, and amount of financial support from parents) university involvement, credit hours and high school grade point average (gpa). As with the demographic variables, several respondents did not provide answers to all of the strain related variables. Table 5 shows the summary results of these variables.

Table 5

Frequencies and Percentages for Strain Related Variables- Total Respondents

<u>Variable</u>	<u>Residential Campus</u>		<u>Commuter Campus</u>	
	<u>Valid n</u>	<u>Valid %</u>	<u>Valid n</u>	<u>Valid %</u>
Employment Status				
Not Employed	222	67.7	96	38.6
Employed Part Time	98	29.9	129	51.8
Employed Full Time	6	1.8	23	9.2
Distance from Permanent Address	75	22.9	200	80.3
Less Than 1 Hour	102	31.1	35	14.1
1-2 Hours	150	45.7	13	5.2
Over 2 Hours				
Scholarships/Grants Yes	224	68.3	197	79.1
Federal or Personal Loans Yes	255	77.7	144	57.8
Financial Support From Parents Yes	259	79	160	64.3
University Involvement Yes	120	36.7	80	32.1
Credit Hours 12-15	191	58.2	155	62.2
High School GPA 3.1-4.0	253	77.1	191	76.7
2.0-3.0	67	20.4	51	20.5
Under 2.0	1	.3	4	1.6

Employment Status

The majority of respondents, 55.1%, indicated that they were not employed (n=318). Among the respondents, 39.3% (n=227) reported that they were employed part time and 5%

(n=29) indicated that they were employed full time. At the residential campus, 67.7% (n=222) indicated that they were not employed compared to 38.6% (n=96) at the commuter campus.

Distance from Permanent Address

The majority of respondents indicated that their university was less than one hour from their permanent address (47.7%, n=275). Approximately a quarter of the respondents (23.7%) reported that their university was 1-2 hours away from their permanent address, and 28.2% (n=163) identified that their university was over 2 hours away from their permanent address. Nearly half (45.7%, n=150) of students at the residential campus reported that they currently resided over 2 hour away from their permanent address. In comparison, 5.2% (n= 13) of students at the commuter campus indicated they were 2 hours away from their permanent address.

Scholarships/Grants and Federal/Personal Loans

The majority of students, 73% (n=421), reported receiving scholarships or grants to assist with financing their college education. There was little difference between the residential campus and the commuter campus, 68.3% and 79.1% respectively.

In regard to federal or personal loans, 69.2% (n=399) of the entire sample reported receiving federal or personal loans. This includes 77.7% (n=255) from the residential campus and 57.8% (n= 144) from the commuter campus.

Parents Providing Financial Support

As a whole, the majority of students reported that their parents were providing financial support for them while they attend college, specifically, 72.6% (n=419). The students at the residential school were receiving more support from their parents (79%, n=259) than were the students from the commuter campus (64.3%, n=160).

University Involvement

To form the variable university involvement, participation in NCAA athletics and extracurricular activities were combined. If individuals participated in one or both, they were coded as being involved in the university. A total of 34.7% (n=200) identified that they were involved in university life, this left 65.3% (n=376) who did not report any participation in university involvement.

Credit Hours and High School Grade Point Average (GPA)

The majority of students from both universities reported that they were enrolled in 12-15 credit hours per semester (60%, n=346).

In regard to grade point average, the majority of students reported their gpa as falling between 3.1-4.0 on a 4 point scale (76.9%, n=444). There was little difference between the residential campus and the commuter campus, 77.1% and 76.7% respectively.

Correlation Matrix

Table 6 presents a correlation matrix for the variables utilized in the Regression models, which will be discussed in detail later in this dissertation. As identified in the matrix, though many variables are significant, the highest correlation value is .277, which is sufficient for this analysis and determines that autocorrelation is not a problem.

Table 6

Correlation Matrix

		Total Strain	University involvement	What is your age?	What university do you attend?	Drank alcohol?	Are you receiving federal or personal student loans?	Family Environment Score	Self-Esteem Score
Total Strain	Pearson Correlation	1	.048	.168**	.277**	.201**	-.135**	.181**	-.167**
	Sig. (2-tailed)		.286	.000	.000	.000	.003	.000	.000
	N	495	495	493	495	442	492	491	493
University Involvement	Pearson Correlation	.048	1	.101*	-.048	.002	-.100*	.100*	.048
	Sig. (2-tailed)	.286		.016	.255	.957	.016	.017	.255
	N	495	576	574	576	518	573	568	573
What is your age?	Pearson Correlation	.168**	.101*	1	-.113**	.007	-.109**	.153**	-.029
	Sig. (2-tailed)	.000	.016		.006	.870	.009	.000	.492
	N	493	574	574	574	517	571	567	571
What university do you attend?	Pearson Correlation	.277**	-.048	-.113**	1	.154**	-.215**	-.041	.014
	Sig. (2-tailed)	.000	.255	.006		.000	.000	.332	.730
	N	495	576	574	576	518	573	568	573
Drank alcohol?	Pearson Correlation	.201**	.002	.007	.154**	1	-.074	.131**	-.004
	Sig. (2-tailed)	.000	.957	.870	.000		.095	.003	.923
	N	442	518	517	518	518	515	511	515

Are you receiving federal or personal student loans?	Pearson								
	Correlation	-.135**	-.100*	-.109**	-.215**	-.074	1	-.119**	-.017
	Sig. (2-tailed)	.003	.016	.009	.000	.095		.005	.689
	N	492	573	571	573	515	573	565	570
Family Environment Score	Pearson								
	Correlation	.181**	.100*	.153**	-.041	.131**	-.119**	1	.160**
	Sig. (2-tailed)	.000	.017	.000	.332	.003	.005		.000
	N	491	568	567	568	511	565	568	565
Self-Esteem Score	Pearson								
	Correlation	-.167**	.048	-.029	.014	-.004	-.017	.160**	1
	Sig. (2-tailed)	.000	.255	.492	.730	.923	.689	.000	
	N	493	573	571	573	515	570	565	573

Strain Variables

Academic Dishonesty and Substance Use

As identified in Chapter 3, several questions were utilized to measure academic dishonesty as well as substance use. The raw numbers that the students reported for various forms of academic dishonesty were combined for a total number of acts of academic dishonesty in the last 30 days. The same process was conducted for the reported substance use of the students in the last 30 days. The response of one individual was removed from the “marijuana” variable due to the extreme nature of self-reported usage in the past 30 days. Table 7 reports the mean and standard deviation for academic dishonesty and substance use for each school.

Table 7

Mean and Standard Deviation for Academic Dishonesty and Substance Use Variables- Total Respondents

<u>Variable</u>	<u>Residential Campus</u>		<u>Commuter Campus</u>	
	<u>$\bar{X}$</u>	<u>SD</u>	<u>$\bar{X}$</u>	<u>SD</u>
Copied Another Student's Test Answers	.02	.149	.04	.215
Used a Cheat Sheet/Secretly Looked at Notes	.02	.204	.02	.136
Submitted Assignment Written by Another	.00	.000	.01	.097
Copied or Modified Assignment by Another	.02	.169	.04	.190
Used Marijuana	2.08	5.718	.94	3.969
Drank Alcohol	2.28	3.769	1.26	2.218
Drank Alcohol to Intoxication	1.41	3.059	.56	1.608
Used Rx Medication Not Prescribed	.15	1.488	.07	.442

Students at both universities report very little academic dishonesty. Specifically, the mean scores for each type of academic honesty measured were under 1 time in a 30 day period. In addition, the levels of marijuana use, alcohol intoxication, and prescription medication use were found to be insignificant based on the difference of means test. Please see Table 7 above for details regarding the mean and standard deviation of these variables. Due to these findings, alcohol use alone will be utilized for the analyses.

Though not specifically used in the regression analyses for this research due to a reported percentage below the 15% required, there were several significant differences, identified by independent samples t-tests, between groups of students from the residential campus and the commuter campus in regard to substance use. There was a significant difference in marijuana use between males from the residential campus ($\bar{X}$ = 3.93, SD = 8.83) and females from the residential campus ($\bar{X}$ = 1.28, SD = 3.38); $t(296) = 3.724$, $p = .000$. There was also a significant difference in marijuana use between males from the residential campus ($\bar{X}$ = 3.93, SD = 8.83) and females from the commuter campus ($\bar{X}$ = .87, SD = 3.82); $t(221) = -3.54$, $p = .000$. In addition, there was a significant difference in marijuana use between males from the residential campus ($\bar{X}$ = 3.93, SD = 8.83) and males from the commuter campus ($\bar{X}$ = .96, SD = 4.19); $t(163) = -2.68$, $p = .008$.

There were also significant differences in the amount of alcohol students reported drinking in a 30 day period based on university. Both male ($\bar{X}$ = 2.32, SD = 3.60) and female ($\bar{X}$ = 2.27, SD = 3.85) students at the residential campus drank significantly more than female students at the commuter campus ($\bar{X}$ = 1.16, SD = 2.19); $t(225) = -3.00$, $p = .003$; $t(343) = -3.03$, $p = .003$.

There were also significant differences in the number of times students drank alcohol to the point of intoxication based on university and gender. Female students at the commuter campus ($\bar{X}$ = .53, SD = 1.55) drank to intoxication significantly less than female students at the

residential campus ($\bar{X}$ = 1.22, SD= 2.86); $t(342) = -2.54$, $p = .011$. Also, females at the commuter campus ($\bar{X}$ = .53, SD= 1.55) drank to intoxication significantly less than male students at the residential campus ($\bar{X}$ = 1.86, SD= 3.46); $t(222) = -3.90$, $p = .000$. Finally, male students at the commuter campus ($\bar{X}$ = .65, SD= 1.75) drank to intoxication significantly less than males at the residential campus ($\bar{X}$ = 1.86, SD= 3.46); $t(165) = -2.74$, $p = .007$.

Total Strain

As discussed in Chapter 3, there were four variables that measured strain (Legitimate Coping, Stressful Life Events, Negative Emotionality, and Failure to Achieve Positively Valued Goals). The scores for these measures were combined for a Total Strain score. Items were recoded as necessary so that a higher score indicated greater levels of strain. Values for this scale range from 0 (no strain) to 183 (complete strain). Students at the residential campus reported a mean Total Strain score of 83.71 with a standard deviation of 12.88. Students at the commuter campus reported a mean Total Strain score of 76.53 with a standard deviation of 11.75.

Several independent samples t-tests were conducted to determine if there was a difference in mean between groups from the residential campus and commuter campus in regard to Total Strain. There was a significant difference in the Total Strain scores for males from the commuter campus ($\bar{X}$ = 74.3, SD= 11.75) and females from the commuter campus ($\bar{X}$ = 77.6, SD= 11.2); $t(212) = -2.05$, $p = .042$. A significant difference was also found in the Total Strain scores for males from the commuter campus ($\bar{X}$ = 74.3, SD= 11.8) and males from the residential campus ($\bar{X}$ = 83.9, SD= 14.7); $t(167) = -4.7$, $p = .000$. Similarly, there was a significant difference in the Total Strain scores for males from the commuter campus ($\bar{X}$ = 74.3, SD= 11.8) and females from the residential campus ($\bar{X}$ = 83.6, SD= 12.0); $t(268) = -5.87$, $p = .000$. Also, there was a significant difference in the Total Strain scores for females from the commuter campus ($\bar{X}$ = 77.6, SD= 11.2)

and males from the residential campus ($\bar{X}$ =83.9, SD= 14.7); $t(219) = -3.61$, $p = .000$. Finally, there was a significant difference in the Total Strain scores for females from the commuter campus ($\bar{X}$ =77.6, SD=11.2) and females from the residential campus ($\bar{X}$ =83.6, SD=12); $t(320) = -4.53$, $p = .000$. Though all previous sex/campus combinations have been significant, there is no significant difference in the Total Strain scores for males from the residential campus ($\bar{X}$ = 83.9, SD= 14.7) and females from the residential campus ($\bar{X}$ =83.5, SD= 12).

Family Background

As previously discussed, the Family Background index (Broidy, 2001) is broken into two separate scales, Emotional Background and Disciplinary Background. A factor analysis was run for this index to determine variability among the variables. The Disciplinary Background scale contains 6 items and had an alpha level of .679. All of the items in the scale were included in the analyses. One of the questions in the Emotional Background scale was dropped from the analysis to secure a higher degree of reliability. As a result, the Emotional Background scale is comprised of 5 items and has an alpha level of .583. Though this alpha level is relatively low, additional factor analyses were not able to raise the value. This index has a range of 0-33, with higher scores indicating greater connectedness and association with family as well as more positive responses to the respondent's behavior. For students at the residential campus, the mean Family Environment score was 13.09 with a standard deviation of 3.355. Students at the commuter campus had a mean score of 13.39 with a standard deviation of 4.061. Though these scores appear relatively low based on face value, very few studies have utilized this scale with college students and reported mean scores.

Self-Esteem

As detailed in Chapter 3 and found in Appendix D, the Self-Esteem scale (Rosenburg, 1979) consisted of ten questions and measured respondent's level of self-esteem. The scale has a range of 0-30, with higher scores indicating a higher degree of self-esteem. Students at the residential campus had a mean score of 13.72 with a standard deviation of 2.368. At the residential campus, students had a mean score of 13.65 with a standard deviation of 2.570.

Scale Reliability

Several of the scales utilized in this study were adapted from those previously used by Broidy (2001). Specifically, variables in the Family Background index and Legitimate Coping scale were taken from previous research regarding college students and General Strain Theory. As several items in these scales and indices have changed for the purposes of this research, as identified in Chapter 3, the specific Cronbach's Alpha scores for certain variables will not be compared to previous research.

The Legitimate Coping scale (Broidy, 2001) has two separate components- how an individual reacts when they are unable to reach specific goals and how they cope when bad things happen to them. A factor analysis was also conducted on each component of the Legitimate Coping scale (Broidy, 2001), and it was determined that each component had three different eigenvalues and alpha levels could not be increased by dropping any specific questions from the analysis. The scale measuring how individual's react when they are unable to reach specific goals had a Cronbach's Alpha value of .424 and the scale determining how they cope when bad things happen to them had a Cronbach's Alpha of .365.

For this study, the scale developed to measure Failure to Achieve Positively Valued Goals received a Cronbach's Alpha of .625. This measure was created to identify how successful

respondents were in achieving the goals that they had set for themselves since entering college. The scale to measure Negative Emotionality/Negative Affective State has a Cronbach's Alpha of .926. This is slightly higher than the alpha level of .89 reached in Broidy's (2001) research. The Stressful Life Events scale has a Cronbach's Alpha of .753, which is comparable to the alpha level of .76 reached by Broidy. Please see Chapter 3 for a complete review of the variables.

A Cronbach's Alpha analysis was conducted on the Total Strain index, which was created by combining the scores from Legitimate Coping, Stressful Life Events, Negative Emotionality/Negative Affective State, and Failure to Achieve Positively Valued Goals. As mentioned above, both Legitimate Coping measures had relatively low Cronbach's Alpha values, however, when included in the Total Strain score a Cronbach's Alpha level of .862 was reached. If the Legitimate Coping measures were left out of the analysis, the Cronbach's Alpha level dropped to .744. In addition, when examining a factor analysis of the Total Strain index, it was determined that the different components were indeed measuring different variables, however, the measures as indicated by the responses in this research were flawed. Based on this information, the Legitimate Coping measures will be left in the Total Strain index and it will be utilized throughout the study.

Multiple Regression Analyses Results

Several statistical analyses were utilized to test the proposed hypotheses, these analyses are a combination of independent samples t-tests and multiple regression models. The first regression model examined the dependent variable, Total Strain, and the impact of several independent variables, Federal or Personal Loans, Self-Esteem, Family Environment, Which University, Age, and Alcohol Use measured as a dichotomous variable. Table 8 reports the results of this multiple regression model.

Table 8

Summary of Multiple Regression Analysis for Total Strain Score

<u>Variable</u>	<u>B</u>	<u>SE(B)</u>	<u>β</u>	<u>t</u>
(Constant)	58.339	6.240		9.350***
University	7.994	1.137	.313	7.032***
Self-Esteem Score	-.962	.218	-.192	-4.407***
Age	.918	.228	.179	4.033***
Family Environment Score	.491	.158	.141	3.108**
Alcohol Yes or No	3.781	1.108	.149	3.411**
Federal or Personal Loans	-1.703	1.204	-.063	-1.414

*p<.05 **p<.01 ***p<.001
R²= .219 F=19.919 (p<.001)

This model explains approximately 22% of the variability in the dependent variable, Total Strain. In this model, as mentioned, alcohol use is measured as a dichotomous variable, do you drink alcohol yes or no. As you can see in Table 8, the university the student attends, self-esteem score, age, family environment score, and alcohol use significantly impact Total Strain score. Specifically, moving from commuting to campus to living on campus raises one's Total Strain score almost 8 points, increases in age and presence of alcohol use also raise one's Total Strain score. As expected and identified in previous research, self-esteem decreases Total Strain score. Interestingly, as one increases in family environment score, strain also increases. This relationship will be discussed in further detail in Chapter 5.

A second model utilized the dependent variable, Alcohol Use (measured by amount), and the impact of the variables; Total Strain, Caucasian/Criminology, NCAA Athletics, Federal or

Personal Loans, and Extracurricular Activities. NCAA Athletics was separated from University Involvement when independent samples t-tests determined that there was no significant statistical difference with the variable combined. This model is seen in Table 9. In this model, the best predictors of strain were removed from the model to better examine this relationship. This model shows that not only do increases in alcohol use increase Total Strain, but for every one point increase in Total Strain, alcohol use raises as well. This acknowledges a potential temporal ordering problem with General Strain Theory and a reciprocal relationship, which will be discussed in Chapter 5 below.

As evident in Table 9, for every one point increase in Total Strain, alcohol consumption per month increase by .052 drinks. Also, those who do not participate in NCAA athletics decrease alcohol consumption per month by 1.654 drinks. During independent samples t-tests, nursing, education, and other majors did not show a significant statistical difference in drinks per month. However, there was a significant statistical difference with the criminology/criminal justice majors. Thus, they were included in the analysis. Individuals who reported being Criminology/Criminal Justice majors had an increase in drinks per month by 2.207, which is similar to previous research and will be discussed further in Chapter 5.

Table 9

Summary of Multiple Regression Analysis for Alcohol Use (Drinks per month)

<u>Variable</u>	<u>B</u>	<u>SE(B)</u>	<u>β</u>	<u>t</u>
(Constant)	1.515	1.980		.765
Total Strain	.052	.012	.203	4.352***
Criminology	2.207	.640	.161	3.449**
NCAA Athletics	-1.654	.775	-.100	-2.134*
Federal or Personal Loans	-.475	.343	-.065	-1.386
Extracurricular Activities	-.062	.330	-.188	-.188

*p<.05 **p<.01 ***p<.001
 $R^2 = .086$ F=8.041 (p<.001)

Hypotheses

- I. Students who live on campus will experience more strain than those who commute to campus. As a result, they will commit more criminal, delinquent, or deviant acts.**

As indicated above, the results of the independent samples t-test identified that students at the residential campus reported experiencing more strain than those at the commuter campus for both male and female students. In addition, students at the residential campus who experienced more strain, also reported more substance use ($\bar{X} = 9.30$, SD= 58.4) than those at the commuter campus ($\bar{X} = 2.80$, SD= 5.9).

To specify this hypothesis further, the first regression model indicates that as students move from commuter campus to residential campus, their Total Strain

score increases by almost 8 points. In addition, students who attend residential campuses report higher levels of alcohol use. Attending a residential college campus significantly increased Total Strain score. Also, attending a residential campus increases alcohol consumption. Even though there is evidence to support this hypotheses, this evidence does not indicate that those who live on campus and experience more strain will in turn drink more alcohol. Other coping mechanisms could become options and will be discussed in Chapter 5.

II. Students at both universities who are involved in university life (extracurricular activities and NCAA intercollegiate sports) will experience less strain than those who are uninvolved. Due to this involvement and the support it provides, these students will commit fewer criminal, delinquent, or deviant acts.

A combined total of 34.7% of students from both universities reported that they were involved in university life. As mentioned above, this variable was created by combining extracurricular activities with NCAA athletic involvement. The independent variables, University Involvement and Total Strain, explain .3% of the variability of the dependent variable, substance use. The model was not significant $F(2,436) = .741, p > .05$. When examined by type of campus, residential or commuter, neither model was significant. However, the model for the commuter school was approaching significance.

Though it was found that University Involvement did not significantly impact strain, NCAA involvement was found to significantly impact alcohol use. Those who participate in NCAA athletics drink higher amounts of alcohol, as seen in the second regression model above.

III. Individuals who score higher on the self-esteem scale will commit less criminal, delinquent, or deviant acts in response to strain.

As evident in the first regression model above, as Self-Esteem score increases, Total Strain score decreases. However, there is no significant relationship between Self-Esteem score and alcohol use. This model is not significant, $F(1,513) = .009, p > .05$.

CHAPTER FIVE

DISCUSSION AND CONCLUSIONS

Introduction

First semester college freshmen are faced with many situational and environmental factors that can lead to increases in strain or stress regardless of their campus location. The variables utilized in this study are identified and measured in Chapter 3 and 4 and will be discussed below. The concept that students who are away from home for the first time might experience more strain fits with the current literature regarding General Strain Theory as well as Emerging Adulthood (Agnew, 1992; Arnett, 2000, Dyson & Renk, 2006, Ford & Schroeder, 2008). This literature was the driving focus for the present research and gained support through this study.

This chapter will include a discussion of the research findings and their implications as well as the strengths and limitations of the current research. In addition, directions for future research will be outlined.

Discussion of the Research Findings

Academic Dishonesty

As mentioned above, measures of academic dishonesty were not included in this analysis due to lower than expected reporting. According to Vandehey, Diekhoff, & LaBeff (2007), approximately 54% of college students in their sample self-reported participating in forms of academic dishonesty. This number is relatively similar to research by the same authors conducted in 1984 as well as 1994. (Haines, Diekhoff, LaBeff, & Clark, 1986; Diekhoff, LaBeff, Clark, Williams, Francis, & Haines, 1996). The current research found that on average, students at the commuter and residential campus reported cheating less than one time in the 30 day period. There are a number of reasons as to why this occurred. First, students from both

universities were emailed the survey instrument approximately one quarter of the way through the first semester, prior to midterms. This was done in an effort to gather an accurate measure of strain without accounting for the added strain from the beginning of the semester or from midterm exams. While this was intended to provide a better measure of strain, it could have had the opposite impact on academic dishonesty. The timing of this survey instrument could have simply been prior to involvement in academic dishonesty. Some courses, specifically introductory courses, may not have presented many opportunities for students to engage in academic dishonesty prior to midterm evaluations and exams.

In addition, this research is attempting to find a connection between strain and academic dishonesty. It is possible that this link does not exist prior to students receiving more information regarding their academic performance than is available in the first few weeks of school. Finally, the current research could provide an accurate measure of the academic dishonesty taking place at the commuter and the residential campus. In other words, academic dishonesty may not be as prevalent at the campuses examined in this research than previously expected.

Substance Use

Except for alcohol use, reports of substance use in the current study were also lower than expected based on the average number of uses in the past 30 days. However, the present study did find that the percent of the sample who had used marijuana in the past 30 days was higher than reported in recent research. According to data collected by the Monitoring the Future survey (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2013), 22.7% of 12th grade students surveyed indicated that they had used marijuana in the last 30 days. Of the first semester freshmen students surveyed in the present study, 36.6% of the sample indicated that they had used marijuana in the past 30 days.

This finding is consistent with the ideas of Emerging Adulthood concerning the time period in an individual's life. As Arnett (2000) indicated, this time period often consists of experimentation and change as one attempts to create a pathway toward adulthood. Based on the results of the present study, a larger percentage of the sample indicated that they had used marijuana in the last 30 days than in previous research (Johnston et al., 2013). However, the total average number of uses in the last 30 days was substantially lower. This indicates that though a greater number of students have used marijuana in the last 30 days, their use may be due to experimentation rather than steady use. Concerning illicit drugs other than marijuana, results of the present study are similar to the Monitoring the Future survey results (Johnston et al., 2013) and reflect the decline among late adolescents that has occurred over the last few years.

Though not utilized in the regression analyses, there were significant differences regarding substance use between respondents based on university and gender, as indicated in Chapter 4. As expected, as well as consistent with previous research, (Johnston et al., 2013), male students at both universities reported more substance use (alcohol, marijuana, prescription drugs not prescribed to them) than female students. Additionally, male and female students at the residential campus reported higher rates, on average, of marijuana use and alcohol use than male and female students at the commuter campus. This finding is consistent with the hypotheses for the present research as well as previous research on General Strain Theory and the ideas of Emerging Adulthood. Even though it was expected, based on previous research, that males would engage in more substance use than females, the significant gender differences based on campus characteristics indicate that the university being a residential campus or a commuter campus plays a significant role in substance use. It is also possible that students who live away

from home have more opportunities to experiment with drugs than do students who are likely living at home based on the presence of parental supervision.

Extracurricular Activities/University Involvement

It was hypothesized that individuals who were involved in extracurricular activities at their university would experience less strain due to the presence of a support group. However, this was not found in the present research. Involvement in university life had no significant impact on level of strain. There are several potential explanations for this finding. First, although more than 15% of respondents, the percentage necessary to be included in the regression analysis, indicated they were involved in university life, the majority of respondents indicated that they were not involved in university life. As indicated in Chapter 4, only 36.7% of the respondents at the residential campus indicated involvement and 32.1% of respondents at the commuter campus indicated involvement. It is possible that if a larger proportion of the participants were involved in extracurricular or other university sponsored activities that this could have impacted the results.

Also, similarly to the academic dishonesty variable, it is possible that this measure of university involvement occurred prior to the students actually becoming involved in university life. Measured at a different point in the semester or in the first year, this variable could have had vastly different results concerning the impact on strain.

Family Environment

As discussed in Chapter 4, there were no significant differences in the Family Environment score between the residential campus ($\bar{X}$ = 13.09, SD= 3.355) and the commuter campus ($\bar{X}$ = 13.39, SD= 4.061). Based on this information, it can be inferred that students, on average, at the residential campus and commuter campus had similar family backgrounds in

regard to emotional and disciplinary upbringing. In regard to the present study, this information could indicate that the family background factors examined had little to no impact on a student's choice to attend a residential campus or a commuter campus for higher education.

Based on previous research, the Family Environment score was expected to decrease the levels of strain that first semester freshmen experience. This measure, taken from Broidy (2001), measures Emotional Background as well as Disciplinary Background, with higher scores indicating greater connectedness and association with one's family as well as appropriate parental responses to behavior. It was hypothesized that as the Family Environment score increased, levels of strain would decrease. This is due to the fact that a close relationship with one's parents and family members serves as a type of barrier to the amount of strain one experiences. The present research, however, finds opposite results. As the Family Environment score increased, so did the amount of strain experienced.

There is a possibility that a greater Family Environment score indicates that the individual has more of a responsibility to their family, which may result in more time spent on maintaining the relationship with their family. This, in turn, could result in the individual experiencing more strain as a result of their family relationships. Higher Family Environment scores could also reflect increased pressure for the student to do well. For instance, if he or she believes that their family will be disappointed if they do not meet expectations or behave a certain way in college, this could result in the individual experiencing more strain. In addition, students may feel greater strain with a higher Family Environment score simply due to missing their family.

An important idea to remember is that strain is not necessarily a negative experience. Simply because individuals with higher Family Environment scores experience higher levels of

strain does not indicate that these individuals will cope with this strain in a negative manner. It is possible that these higher levels of strain will resolve themselves in one of the pro-social manners discussed in Chapter 2. If this is the case, being connected to one's family and potentially feeling pressure to excel can be seen as a more positive experience.

Alcohol/Strain Relationship

As discussed in Chapter 4, the relationship between alcohol use and strain presents some interesting findings in the present study. Alcohol use was examined and analyzed utilizing two different measures in the present study. One utilized alcohol as a dichotomous variable (Do you drink alcohol?), and the other examined alcohol use based on amount and phrased as an open ended question (How often have you drank alcohol in the last 30 days?). This was done in an attempt to determine a potential reciprocal relationship between alcohol use and strain. Evidence of this relationship exists in the literature (Swatt, Gibson & Piquero, 2007), however, it has not been studied specifically with first semester college students.

As identified in Chapter 4, alcohol use, when measured as a dichotomous variable, significantly impacted Total Strain score. Specifically, moving from a commuter campus to living on campus raised one's Total Strain score almost 4 points on a 183 point scale. Based on the literature, as discussed in Chapter 2, this finding does not come as a surprise. It was expected that first semester freshmen living on campus would have higher levels of alcohol use for a variety of reasons. Specifically with this research, it was hypothesized that this would be related to the level of strain that they experience.

As mentioned, this relationship was examined from a second point of view. The current research identified that not only do increases in alcohol use increase Total Strain, but for every one point increase in Total Strain, alcohol use increases as well. This specifically acknowledges

a potential temporal ordering problem with General Strain Theory and a reciprocal relationship between strain and alcohol use. Previous research has indicated that this problem could be due, in part, to alcohol use causing depression as a result of the negative consequences that the individuals experience. Another explanation could be that drinking more alcohol leads to the individual experiencing more strain based on the potential negative impacts that alcohol could have on one's personal and professional life. Due to the cross-sectional nature of the present research, it is impossible to determine the nature of the causal or reciprocal relationship between strain and alcohol use. However, this research does add to the literature supporting the need for future research to examine this relationship.

Criminology/Criminal Justice Majors and Alcohol Use

As discussed in Chapter 3, college major was examined to determine if this variable had an impact on the strain that the student experienced. This variable also has an interesting impact in regard to alcohol use. When examining the impact that college major had on alcohol use, the present research found that criminology/criminal justice majors reported more alcohol use than other majors. Specifically, individuals who reported being criminology/criminal justice majors had an increase in drinks per month by 2.207 drinks than other majors. Prior research has identified that criminology/criminal justice majors are better informed about issues and policies having to do with the criminal justice system than other students, including substance use (Benekos, P., Merlo, A.V., Cook, W.J., & Bagley, K., 2002). This could indicate that they are more aware of the impact that underage alcohol use could have on their future careers, which should lead to less risk seeking behavior in regard to alcohol. However, little research has been done to specifically examine if and how being a criminology/criminal justice major impacts substance use, especially alcohol use.

Gray and Brown (2009) identified that criminal justice majors were more likely to consume alcohol as well as binge drink in a 30 day period than non-criminal justice majors. The present research identified similar results and adds to the literature concerning the increases in alcohol use for criminology/criminal justice majors.

As indicated above, research has shown that criminology/criminal justice majors are often more aware of issues and policies concerning the criminal justice system than non-criminology/criminal justice majors (Benekos et al., 2002). The results of the present study could be due to first semester freshmen students not being as concerned, or yet aware, about the consequences of their underage drinking as students further in their academic careers.

A second potential reason as to why research, including the present study, has found that criminology/criminal justice majors consume more alcohol than non-criminology/criminal justice majors might have to do with the types of individuals who are drawn to careers in the criminal justice system. There could be a connection between the risk seeking behavior of alcohol use and the potentially high-risk field of criminal justice. For instance, students might be attracted to the field of criminal justice due to the daily changing work environment, high-risk interactions with other individuals, or the potentially adrenaline inducing circumstances. These same situations might correspond with reasons for alcohol use, sometimes excessively.

If this theory is correct and criminology/criminal justice majors are naturally more risk seeking than other majors, this finding could have important implications on other areas of research. Studies have shown that those employed in the criminal justice field, specifically law enforcement, are more likely to have alcohol related problems as well as a history of binge drinking (Ballenger, J., Best, S., Metzler, T., Wasserman, D., Mohr, D., Liberman, A., et al., 2010). The idea that risk seeking behaviors concerning alcohol use begins before students

actually enter the law enforcement field could indicate that the stress of a career in law enforcement alone is not all that is causing excessive alcohol use in law enforcement officials. This finding could be more related to things such as personal characteristics rather than stressors of the job that previous research indicates (Ballenger et al., 2010).

Policy Implications of the Current Research

Transitioning from high school to college is a major upheaval in many student's lives. As indicated, this time period often involves moving away from one's family and support system as well as making decisions that can potentially alter the course of one's life (Leary & DeRosier, 2012). As with any major life change, the transition to college can be ameliorated by utilizing coping mechanisms and support techniques to manage the stress and anxiety that students feel (Schrader & Brown, 2008).

Research has supported the development of first year experience courses to assist students in gaining the necessary skills to be successful in their transition to college. These skills often include time management, problem solving and coping mechanisms (Schrader & Brown, 2008). As indicated in the current research, students attending a residential campus experience greater levels of strain than those at a commuter campus. This finding indicates a potential greater need for these freshmen experience courses at universities where the freshmen students are required to or often opt to live on campus.

Along with experiencing more strain, the present research also indicates that students who live on campus drink greater amounts of alcohol than those who commute to campus. In addition to a freshmen experience course which would provide problem solving skills and coping mechanisms, this finding also indicates that freshmen experience courses could benefit from including substance abuse information.

In addition, consequences that students may experience as a result of an unsuccessful transitions to college may be long term and impact areas such as future academic performance, employment, and health/wellness. Students who fail to successfully adapt to the college environment will be less likely to continue with their pursuit of higher education at their current university. From a university perspective, this will negatively impact retention rates for freshmen students and potentially impact funding. From the student perspective, not adjusting successfully to the college environment could greatly reduce the likelihood of that individual earning a college degree. This, in turn, would impact the potential employment opportunities for the student as well as long-term earning potential.

As indicated above, students at the residential campus also reported higher rates of alcohol use than students at the commuter campus. This finding could have potential long-term impacts on the health/wellness of the students as well. Higher rates of alcohol use in college could lead to a higher risk of binge drinking as well as alcoholism in adulthood. These risky behaviors can greatly impact the health of an individual and lead to life-long health problems.

Limitations of the Current Research

As with any scholarly work, this dissertation has several limitations that will be discussed in detail below. As identified in Chapter 3, the number of incoming freshmen students was projected to be similar for the residential school and the commuter school. This information was derived from the incoming freshmen population for the last few years as well as the total undergraduate student population. However, the incoming freshmen population for the residential and commuter schools were not similar for the 2014 fall semester, with 2,636 email addresses for incoming freshmen from the residential campus and only 1,686 email addresses for incoming freshmen from the commuter campus. As a result, responses were gathered and

included in the analysis from approximately 100 more students at the residential campus than at the commuter campus. Even though the response rate for each university was similar, 20% at the commuter campus and 17% at the residential campus, similar enrollment numbers for both freshmen classes could have potentially impacted the results of this study.

Another limitation for the current research is the inability to utilize certain variables connected to substance use and academic dishonesty. Measures of substance use, other than alcohol, were significantly lower than hypothesized and were not utilized in the regression models due to being below the 15% required of the sample for the analysis. The same situation occurred with the measure of academic dishonesty. There are several possible explanations for these findings. First, it is possible that students from both universities are simply not engaging in acts of academic dishonesty or substance use. The second explanation could also be that they are engaging in these acts, but not reporting them on the survey instrument. This is highly unlikely due to the amount of research identifying that respondents tend to be truthful when reporting on web/internet survey instruments (Dillman, 2009).

The most probable reason as to why the measures of substance use and academic dishonesty could not be utilized in this research concerns the timing of the survey instrument. In order to measure an accurate evaluation of strain, the survey was sent halfway between the start of the semester and midterm evaluations. It is possible that reports of substance use and academic dishonesty were not as high as hypothesized because they had yet to take place. A source of strain for many, if not all, freshmen students are their grades. If these students had not received many grades by the time that the survey was distributed, levels of strain from this source may not have impacted their levels of substance use or academic dishonesty yet. It is

possible that the same measures given at a different time in the semester would have had different results.

Another limitation with the current research concerns the development of the variable, Total Strain. While much research on General Strain theory has utilized the same technique of combining scores for separate strain variables into a single score, it is important to understand the potential drawbacks of this procedure. Combining all of the different scores the respondents reported for the three types of strain (failure to achieve positively valued goals, presentation of noxious stimuli and removal of positively valued stimuli) limits the potential understanding of the variable. In addition, there could be important information within each type of strain that will be lost with the combining of these variables. For instance, it is possible that one type of strain could be significantly related to another variable, but that relationship might be lost with the combination of the types of strain.

Finally, there are limitations with the current research concerning the respondents. The majority of the respondents were female as well as Caucasian. As Agnew (2001) identified, there are differences in the way females and males respond to strain. With the majority of the respondents indicating they were female, it will be difficult to expand this research to the general population. The same issue arises with the majority of the respondents indicating that they are white. While no research, to this author's knowledge, has examined in great detail how different races respond to strain, there could be specific differences that would impact the generalizability of the current research.

Directions for Future Research

To add to the literature concerning General Strain Theory and college freshmen, future research should attempt to replicate the current research. As discussed above, the relationship

between emerging adulthood and General Strain Theory presents a unique perspective for first semester freshmen students. Other than the present research, this relationship has yet to be explored fully.

Also, this dissertation utilized a relatively specific population based on the variables chosen to explore. Future research on general strain theory with first semester college students should attempt to measure the strain variables with a larger sample as well as with students from a range of geographic locations. A larger and more representative sample would provide higher levels of generalizability as well as a better source of information.

As indicated above, this study utilized a total strain score, combining scores for the different causes of strain measured. Future research on the subject should examine the different causes of strain separately to determine if there is a difference between with the individual causes of strain. It is possible that one specific cause of strain could impact different variables more than another. Research such as this could impact policy regarding freshmen experience courses by pinpointed specific sources of strain that might impact first semester freshmen more than others.

In addition, as mentioned above, the present research was unable to utilize the variables created for substance use and academic dishonesty. Based on the literature and previous research, these variables are significant to General Strain Theory and should be included in future research.

Though it was not necessary for the current research, future research could examine the levels of strain college students experience in a longitudinal manner. This would allow for more information regarding strain, the variables that impact strain, as well as factors that result from strain.

Conclusions

College students are often faced with situations that may cause strain or anxiety, specifically, first semester college students. This time in one's life is characterized by dramatic change in many different areas, including personal, social, and professional. Changes in environment can also lead to changes in the amount and types of strain that college student's experience. This research attempted to examine how environment, either attending a commuter college campus or residing on campus, impacted these variables.

The current research supports the idea that students who live on campus experience more strain than students who commute to campus. This is based on the hypothesis that students who commute to campus are able to keep much of their support group of family and friends intact as they enter the world of higher education in comparison to students who live on campus and are away from their family and friends for, for many, the first time in their lives. In addition to experiencing greater levels of strain, this present research also identified that students who live on campus drink significantly more alcohol than those who commute to campus. Also, based on results of independent samples t-test, male and female students who live on campus abuse marijuana and prescription medication not prescribed to them more than commuter students.

As discussed above, this research supports important policy implications concerning the presence and adoption of freshmen experience courses. Additionally, this study identified that students at the commuter campus and the residential campus had similar family backgrounds and connectedness based on the Family Background score, which identified that quality of the available support group is similar. Based on this information, it can be assumed that an additional variable, potentially university location, is impacting level of strain while the family background score is relatively constant. This research calls for the adoption of these freshmen

experience courses specifically at residential campuses where the lack of a support group of friends and family is more pronounced.

Examining the amount and type of strain that first semester college students experience is important for a wide variety of reasons. Most importantly, if we, as educators, understand this strain more fully, then we can assist students in coping with their strain responsibly rather than by substance abuse or academic dishonesty. This would help to maintain student enrollment as well as improve the skill sets and the quality of students that are being sent into the world.

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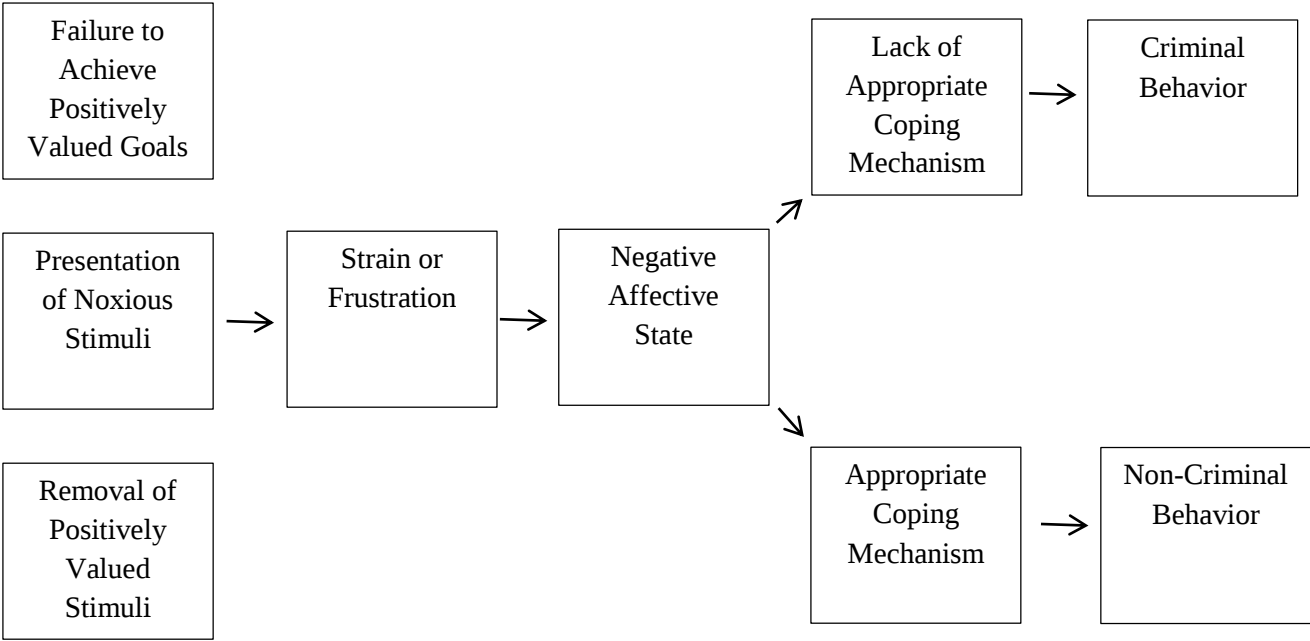
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Appendix A
General Strain Theory Diagram



Appendix B

Studies of General Strain Theory

Year	Author	Sample	Method	Strain Variables	Results
1992	Agnew, R. and White, H.	First wave of the Rutgers Health and Human Development Project, 1,380 adolescents ages 13, 15 and 18	Original data secured through interviews, questionnaires, tests and examinations	Negative life events, life hassles, negative relations with adults, parental fighting, neighborhood problems, unpopular with opposite sex, occupational strain, clothing strain, delinquency, drug use	Adolescents with delinquent friends are more likely to respond to strain with delinquency and drug use, negative relations have a substantial effect on deviance even after controlling for social control and differential association measures
1994	Burton, V., Cullen, F., Evans, T. and Dunaway, R.	555 adults from a midwestern area	Questionnaire	Economic aspirations/expectations, perception of blocked economic opportunities, relative depravation, crime	No strain variable significantly affected criminality. General Strain Theory does not explain criminal behavior as well as other criminological theories.
1994	Paternoster, R. and Mazerolle, P.	First and second waves of the National Youth Survey (NYS), 1,525 youth between the ages of 11-17	Original data secured through surveys	Neighborhood problems, negative life events, negative relations with adults, school/peer hassles, traditional strain, delinquency	Negative relationships with adults, feelings of dissatisfaction with friends and school life, and experiencing stressful life events are positively related to delinquency. Living in an unpleasant neighborhood is positively related to delinquency
1996	Brezina, T.	Second and third wave of the Youth in Transition survey, 2,213 male public high school students	Original data secured through interviews	Parental punitiveness, mean teacher, dissatisfaction with school, negative affect, delinquency	Strain leads to negative affective states, delinquency is a successful adaptation to strain
1998	Hoffman, J. and Miller, A.	Family Health Study (1993-1995), 795 children and adolescents between the ages 11-17	Questionnaire	Negative life events, Junior High Life Experience Survey, Family Inventory of Life Events and Life Changes, delinquency	Those who feel in control of their lives, feel good about themselves, or do not associate with delinquent peers are unlikely to react to strain with delinquency. Adolescents high in self-efficacy and high self-esteem decrease their involvement in delinquency when negative life events occur, increased negative life events lead to increases in delinquency
2000	Aseltine, R., Gore, S., and Gordon, J.	1,208 adolescents and young adults residing in the greater Boston metropolitan area	Interviews	Delinquency and drug use, aggression, family and peer relationship stresses, negative personal experiences, life stresses, family conflict, peer conflict, anxiety, control and personal efficacy, family attachment, exposure to delinquent peers	Limited support for general strain theory, negative life events and conflict with family members significantly and positively related to deviance
2000	Mazerolle, P., Burton, V., Cullen, F., Evans, T., and Payne, G.	263 high school students in the midwestern United States	Self-administered surveys	Removal of positive stimuli, presentation of noxious stimuli, anger, delinquency	Strain has a direct effect on violence, anger does not mediate the effects of strain on delinquency

2000	Mazerolle, P. and Maahs, J.	First two waves of the National Youth Survey, 1,613 adolescents between the ages of 11-17	Original data secured through surveys	Negative relations with adults, school/peer hassles, neighborhood problems, negative life events, composite strain, delinquent behavior	Individuals experiencing more strain reported higher levels of delinquent participation. When strain and conditioning influences (exposure to delinquent peers) co-occur, delinquency increases.
2000	Piquero, N. and Sealock, M.	150 youth at a detention center in a mid-Atlantic state, between the ages of 13-18.	Interviews	Presentation of noxious stimuli, physical abuse directed toward the youth, physical abuse toward others, emotional abuse directed toward youth, negative affect, peer delinquency, family communication, coping skills, interpersonal aggression and property offending	Youth who reported higher levels of social coping skills also reported engaging in property offending and interpersonal aggression. Individuals who engaged in spiritual coping were less likely to engage in property offending.
2001	Broidy, L.	896 undergraduate students at a northwestern university in the United States.	Survey	Failure to achieve positively valued goals, loss of positively valued stimuli, presentation of negative stimuli, negative emotions, legitimate coping strategies, illegitimate/criminal outcomes	Lack of success at reaching one's goals reduces the likelihood that individuals respond to strain with anger. Stressful life events and lack of fairness in goal outcomes increases strain-induced anger. Strain-induced anger significantly increases the likelihood of illegitimate outcomes. Individuals who respond to strain with negative emotions other than anger are less likely to adopt illegitimate coping.
2002	Agnew, R., Brezina, R., Wright, J. and Cullen, F.	Second wave of the National Survey of Children, 2,300 children between the ages of 7 and 11	Original data secured through interviews	Family strain, conflict with parents, parents lose control of feelings, school hatred, picked on by kids, neighborhood strain, sociodemographic variables, negative emotionality/low constraint, delinquency, aggression/vandalism	Negative emotionality/low constraint condition effect of strain on delinquency, strain likely to lead to delinquency among those high in negative emotionality/low constraint, peer abuse increases delinquency in older juveniles high in negative emotionality/low constraints
2003	Mazerolle, P., Piquero, A. and Capowich, G.	338 undergraduate students located in the western United States	Questionnaires	Intentions to commit crime, situational anger, trait anger, prior behavior, moral beliefs	Experiencing strain at school influences negative emotions such as situational anger as well as behavioral intentions to deviate. Feelings of inequity may generate intense feelings of anger related to one's sense of unfairness. Anger is a critical influence in the explanation of crime and deviance.
2008	Ford, J. and Schroeder, R.	Harvard School of Public Health's College Alcohol Study, 14,000 students	Original data secured through surveys	Academic strain, negative affective state, crime	Academic strain is significantly associated with non-medical use of stimulants, academic strain is significantly associated with depression.

2009	Moon, B., Hays, K., and Blurton, D.	294 university students in the western United States enrolled in freshmen-level courses	Questionnaires	Desired goal blockage, family conflict, parental punishment, teachers' emotional punishment, gender discrimination, race discrimination, criminal victimization, negative community environment, negative emotional, deviant behavior	Students who experienced desired goal blockage, teachers' emotional punishment, or racial discrimination were likely to engage in deviance. Family related strains and gender discrimination were not significantly related to deviance. Students experiencing racial discrimination were more likely to engage in violent deviant behavior.
2010	DeCoster, S. and Zito, R.	385 six, seventh and eighth graders at a southeastern middle school	Surveys	Life Events Checklist, Adolescent Perceived Events Scale, negative emotions, delinquency	Females report higher levels of depression, stress is associated with delinquency for females and males, anger in females is more likely to be accompanied by depression than is anger in males
2010	Slocum, L.	Collaborative Perinatal Project and the Pathways to Adulthood study, 1,468 individuals followed over 20 years	Interview	Negative emotionality/low constraint, childhood, adolescent and adult stressors, depression, adolescent and past year substance use	Negative emotionality/low constraint had a direct relationship with adolescent substance use. Adult stressor exposure had a stronger effect on depression and on past year substance use for individuals high in negative emotionality/low constraint.
2011	Higgins, G., Piquero, N. and Piquero, A.	National Longitudinal Survey of Youth, 413 children and adolescents	Survey	Peer rejection, delinquency/crime	Relationship between peer rejection and delinquency varied across gender, females experienced different levels of strain than did males.
2013	Listwan, S., Sullivan, C., Agnew, R., Cullen, F., and Colvin, M.	1,613 individuals released from prison and sent to halfway houses in the state of Ohio	Interviews	Negative relations with other inmates, negative relations with correctional officers, negative prison environment, anticipated strains, recidivism	Negative environment was related to higher probability of arrest and reincarceration, negative relations with other inmates are associated with higher likelihood of reincarceration.
2013	Smith, T., Langenbacher, M., Kudlac, C., and Fera, A.	461 undergraduate students at a private college	Questionnaires	Blockage of positively valued goals, presence of negatively valued stimuli, removal of positively valued stimuli, cumulative stress, academic dishonesty	Personal academic shortcomings increase cheating behaviors. Frustration due to blocked goals and cumulative stress significantly predicted exam cheating and plagiarism.

Appendix C
Informed Consent Form

INFORMED CONSENT

You are invited to participate in this survey as part of a research project that I am conducting as a doctoral student at Indiana University of Pennsylvania. The information below is provided to help you make an informed decision concerning your participation. If you have any questions, please do not hesitate to ask by emailing me at LRBS@iup.edu.

The purpose of this study is to examine the levels of stress and strain that college freshmen experience. This survey will also ask questions concerning goals that you have set for yourself and how successful you have been at reaching those goals. Questions will be asked using the online survey tool, Qualtrics, and should take no more than 15 minutes of your time.

All the information that you share will be kept completely anonymous, none of your survey responses can be connected back to you. The information that you provide will be used to compare freshmen students at two universities.

Your participation in this study is voluntary. If you choose to participate in the survey and decide that you would like to stop, you may exit your browser at any time without consequence. Refusal to participate or a subsequent decision to discontinue participation will not result in penalty or loss of benefits to which you are otherwise entitled. If you are willing to participate in this study, please indicate that you agree to these terms below. By agreeing to these terms and beginning the survey instrument, you are indicating that you are consenting to participate in the study.

This survey will ask questions regarding negative experiences that you may have experienced in your life (e.g., sexual abuse/harassment, physical abuse/harassment, victim of a crime, victim of discrimination) and concerning past criminal behavior (e.g., smoking marijuana, using prescription medication not prescribed to you). There is the possibility that you may experience some psychological or emotional distress when answering questions such as these. Should this occur, please contact your college counseling center. If you are an Indiana University of Pennsylvania student, you can reach the Counseling Center at 724-357-2621. If you attend Youngstown State University, please contact Counseling Services at 330-941-3737.

In order to thank you for your participation in this study, you have the option of entering your personal information for the chance to win a \$20 Amazon gift card. Should you choose to participate by completing the survey instrument, the following link will take you to a secondary survey asking for your contact information. This link is in no way connected to the answers you provided in the original survey instrument. You will only be contacted at the email address you provide should your name be drawn as a winner.

If you have any questions concerning the study or the survey, please contact myself or the faculty sponsor listed below.

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This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724-357-7730).

Appendix D Survey Instrument

*Portions of this survey instrument were taken from: Broidy, L. (2001). A test of general strain theory. *Criminology*, 39(1), 9-35.

Please answer the following questions concerning goals that you set for yourself.

How often do you do the following when you are unable to reach a certain goal?

	Never	Rarely	Sometimes	Always
1. I realize it <i>wasn't</i> very important after all.	☐	☐	☐	☐
2. I ignore it and think about what I have accomplished.	☐	☐	☐	☐
3. I tend to focus on it even more.	☐	☐	☐	☐
4. I know it is <i>not</i> my fault.	☐	☐	☐	☐
5. I know I should have tried harder.	☐	☐	☐	☐
6. I try to figure out where I went wrong so that I can change the outcome.	☐	☐	☐	☐
7. I try to avoid dealing with the problem.	☐	☐	☐	☐
8. I try to get some physical exercise to make myself feel better.	☐	☐	☐	☐
9. I try talking to friends and family members to make myself feel better.	☐	☐	☐	☐
10. I try writing in a journal to make myself feel better.	☐	☐	☐	☐
11. I try talking to a therapist to make myself feel better.	☐	☐	☐	☐
12. I am likely to withdraw from friends and family and spend most of my time alone until I feel better.	☐	☐	☐	☐

How often do you feel_____ when you are unable to reach a goal you have set for yourself?

	Never	Rarely	Sometimes	Always
1. Alone	☐	☐	☐	☐
2. Angry	☐	☐	☐	☐
3. Cheated	☐	☐	☐	☐
4. Depressed	☐	☐	☐	☐
5. Disappointed	☐	☐	☐	☐
6. Frustrated	☐	☐	☐	☐
7. Guilty	☐	☐	☐	☐
8. Insecure	☐	☐	☐	☐
9. Overwhelmed	☐	☐	☐	☐
10. Resentful	☐	☐	☐	☐
11. Scared	☐	☐	☐	☐
12. Stressed	☐	☐	☐	☐
13. Upset	☐	☐	☐	☐
14. Worried	☐	☐	☐	☐
15. Worthless	☐	☐	☐	☐

Please answer the following questions regarding your ability to reach your goals.

<u>Since starting college...</u>	Not at all Successful	Somewhat Successful	Successful	Very Successful
1. How successful have you been in reaching the academic goals that you have set for yourself?	☐	☐	☐	☐
2. How successful have you been in reaching the social goals that you have set for yourself?	☐	☐	☐	☐
3. How successful have you been in reaching the relationship goals that you have set for yourself?	☐	☐	☐	☐
4. How successful have you been in reaching the health/wellness goals that you have set for yourself?	☐	☐	☐	☐

Please identify how you would respond.

<u>How often do you do the following when bad things happen to you?</u>	Never	Rarely	Sometimes	Always
1. I realize it <i>wasn't</i> very important after all.	☐	☐	☐	☐
2. I ignore it and think about what I have accomplished.	☐	☐	☐	☐
3. I tend to focus on it even more.	☐	☐	☐	☐
4. I know it is <i>not</i> my fault.	☐	☐	☐	☐
5. I know I should have tried harder.	☐	☐	☐	☐
6. I try to figure out where I went wrong so that I can change the outcome.	☐	☐	☐	☐
7. I try to avoid dealing with the problem.	☐	☐	☐	☐
8. I try to get some physical exercise to make myself feel better.	☐	☐	☐	☐
9. I try talking to friends and family members to make myself feel better.	☐	☐	☐	☐
10. I try writing in a journal to make myself feel better.	☐	☐	☐	☐
11. I try talking to a therapist to make myself feel better.	☐	☐	☐	☐
12. I am likely to withdraw from friends and family and spend most of my time alone until I feel better.	☐	☐	☐	☐

Please indicate how much you agree or disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. If I see something in a store that I want, I just buy it.	☐	☐	☐	☐
2. I'd rather spend money on something I wanted now than to put it in the bank.	☐	☐	☐	☐
3. I <i>don't</i> deal well with anything that frustrates me.	☐	☐	☐	☐
4. I really get angry when I ride behind a slow driver.	☐	☐	☐	☐
5. If someone insulted me, I would be likely to hit or slap them.	☐	☐	☐	☐
6. I enjoy activities where there is a lot of physical contact.	☐	☐	☐	☐
7. I like to read books.	☐	☐	☐	☐
8. The best way to solve an argument is to sit down and talk things out, even if it takes an hour or so.	☐	☐	☐	☐
9. I enjoy roller coaster rides.	☐	☐	☐	☐
10. Even when I'm not in a hurry I like to drive at high speeds.	☐	☐	☐	☐
11. I like to take chances.	☐	☐	☐	☐
12. The things I like to do best are dangerous.	☐	☐	☐	☐

Please indicate how much you agree or disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. On the whole, I am satisfied with myself.	☐	☐	☐	☐
2. At times I think I am no good at all.	☐	☐	☐	☐
3. I feel that I have a number of good qualities.	☐	☐	☐	☐
4. I am able to do things as well as most other people.	☐	☐	☐	☐
5. I feel I do <i>not</i> have much to be proud of.	☐	☐	☐	☐
6. I certainly feel useless at times.	☐	☐	☐	☐
7. I feel that I am a person of worth.	☐	☐	☐	☐
8. I wish I could have more respect for myself.	☐	☐	☐	☐
9. All in all, I am inclined to think I am a failure.	☐	☐	☐	☐
10. I take a positive attitude toward myself.	☐	☐	☐	☐

<i>How often have you experienced the following events in your entire life?</i>	Never	Once	2-3 Times	4 or More Times
1. Getting a bad grade in a class.	☐	☐	☐	☐
2. Failing an exam or quiz.	☐	☐	☐	☐
3. Getting into a disagreement with a boyfriend or girlfriend.	☐	☐	☐	☐
4. Breaking up with a boyfriend or girlfriend.	☐	☐	☐	☐
5. Getting into a disagreement with a close friend.	☐	☐	☐	☐
6. Having a close friend or boyfriend/girlfriend move away.	☐	☐	☐	☐
7. Having someone that you care about die.	☐	☐	☐	☐
8. Suffering from a serious or prolonged illness.	☐	☐	☐	☐
9. Having or being responsible for an unplanned pregnancy.	☐	☐	☐	☐
10. Having a close friend experience an unplanned pregnancy.	☐	☐	☐	☐
11. Gaining weight without wanting to.	☐	☐	☐	☐
12. Being fired from a job.	☐	☐	☐	☐
13. Having money problems.	☐	☐	☐	☐
14. Getting into a car accident.	☐	☐	☐	☐
15. Being the victim of a crime.	☐	☐	☐	☐
16. Being physically harassed or physically abused.	☐	☐	☐	☐
17. Being sexually harassed or sexually abused.	☐	☐	☐	☐
18. Being discriminated against on the basis of your sex, race, religion or sexual orientation.	☐	☐	☐	☐

Please indicate how much you agree or disagree with the following statements concerning your family.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. Our family environment is very warm.	☐	☐	☐	☐
2. I am close with my parent(s) or guardian(s).	☐	☐	☐	☐
3. My parent(s) or guardian(s) pay little attention to what I do.	☐	☐	☐	☐
4. My parent(s) or guardian(s) don't care where I am or what I am doing.	☐	☐	☐	☐
5. My parent(s) or guardian(s) recognized when I do something well.	☐	☐	☐	☐
6. My parent(s) or guardian(s) rewarded me when I do something well.	☐	☐	☐	☐
7. My parent(s) or guardian(s) and I argue a lot.	☐	☐	☐	☐
8. My parent(s) or guardian(s) are strict with me.	☐	☐	☐	☐
9. My parent(s) or guardian(s) keep a close eye on me.	☐	☐	☐	☐
10. My parent(s) or guardian(s) have a say in where I go or what I do.	☐	☐	☐	☐
11. My parent(s) or guardian(s) recognize when I do something wrong.	☐	☐	☐	☐
12. My parent(s) or guardian(s) express concern when I do something wrong.	☐	☐	☐	☐

Please indicate how much you agree or disagree with the following statements.

	Strongly Agree	Agree	Disagree	Strongly Disagree
1. It is morally wrong to break the law.	☐	☐	☐	☐
2. Sometimes you just don't have any choice but to break the law.	☐	☐	☐	☐
3. If breaking the law doesn't really hurt anyone and you can make a quick buck doing it, then it's really not that wrong.	☐	☐	☐	☐
4. No matter how small the crime, breaking the law is a serious matter.	☐	☐	☐	☐
5. It is alright to get around the law if you can get away with it.	☐	☐	☐	☐

How often have you done any of these behaviors in the last 30 days?

1. Used marijuana?_____
2. Drank alcohol?_____
3. Drank alcohol to the point of intoxication?_____
4. Used prescription medication that was not prescribed to you?_____

How often have you done any of these behaviors in the last 30 days?

1. Copied another student's test answers?
2. How many times in the past *two months* have you used a cheat sheet or secretly looked at your notes for a test?
3. How many times in the past *two months* have you submitted an assignment written by another person?
4. How many times in the past *two months* have you copied or modified an assignment written by another person?

Please answer the following questions.

- | | None | 1-2 | 3-4 | 5 or More |
|--|-----------------------|-----------------------|-----------------------|-----------------------|
| 1. In the last year, how many of your friends have done something they could have gotten arrested for? | ☐ | ☐ | ☐ | ☐ |
| 2. In the last year, how many times have you done something you could have gotten arrested for? | ☐ | ☐ | ☐ | ☐ |

- Please answer the following questions concerning yourself and your personal history

1. What is your gender?
 - ☐ Male
 - ☐ Female
2. What is your age? _____
3. With what race do you most identify?
 - ☐ African American
 - ☐ Caucasian
 - ☐ Other
4. What is your current academic year?
 - ☐ Freshmen
 - ☐ Sophomore
 - ☐ Junior
 - ☐ Senior
5. What is your college major?
 - ☐ Criminology/Criminal Justice
 - ☐ Nursing
 - ☐ Education
 - ☐ Other
6. What is your employment status?
 - ☐ Employed full time
 - ☐ Employed part time
 - ☐ Not Employed
7. How far is your university from your permanent address?
 - ☐ Less than one hour
 - ☐ 1-2 hours
 - ☐ Over 2 hours
8. Do you live in student housing on campus?
 - ☐ Yes
 - ☐ No
9. If you do not live at home, how often in the **last 30 days** have you been home?

10. How often in the **last 30 days** did you communicate with your family members in the following ways?
 - ☐ Phone call? _____
 - ☐ Text message? _____
 - ☐ Skype or other video technology? _____
11. Were you awarded scholarships or grants to assist with college tuition?
 - ☐ Yes
 - ☐ No
12. Are you receiving federal or personal student loans?
 - ☐ Yes
 - ☐ No
13. Are your parents/guardians providing you with financial support while you attend college?
 - ☐ Yes
 - ☐ No
14. Are you involved in NCAA intercollegiate sports?
 - ☐ Yes
 - ☐ No
15. Do you participate in extracurricular activities associated with your university?
 - ☐ Yes
 - ☐ No
16. If yes, please indicate what extracurricular activities you are involved in.
17. How many credit hours are you currently registered for?
 - ☐ Under 12 credits
 - ☐ 12-15 credits
 - ☐ Over 15 credits

18. What was your high school grade point average (GPA) upon graduation?
- ☐ Under 2.0
 - ☐ 2.0-3.0
 - ☐ 3.01-4.0