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Psychological distress and adjustment in college students

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PSYCHOLOGICAL DISTRESS AND ADJUSTMENT IN COLLEGE STUDENTS

by

Donovan Miles

A Thesis

Submitted to the
Department of Educational Services and Leadership
College of Education

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Abstract

Donovan Miles

PSYCHOLOGICAL DISTRESS AND ADJUSTMENT IN COLLEGE STUDENTS

2016-2017

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Master of Arts in School Psychology

The mental health needs of college students have risen dramatically. According to Kitzrow (2003), an estimated 84% of students who walked into a school counseling centers show significant causes for concern. These students were at high risks because of a variety of psychological distress. The current study sought to understand the multidimensional impact of mental health concerns on students' academic adjustment. Undergraduate students from a northeast public university completed an online survey that comprised of demographic information and two Likert type scales that measured psychological distress and academic adjustment. Results indicated that depression, generalized anxiety, social anxiety, and eating concerns significantly impacted academic adjustment of students. Implications and recommendations were discussed in relation to the key findings of the study.

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Chapter 1

Problem

The goal of this study was to explore the impact of psychological distress on academic adjustment of college students from a medium size public university in the northeast region. Mental health has become an ever-increasing concern within our society. New advances in technology and treatment have allowed us to delve deep into the brain and all of its intricacies. With each new discovery, we can uncover some of the issues that presented themselves within the field of mental health. Because of this, the psychological disturbances that therapist diagnose and treat have become even more complex (Hall, 2012). Therefore, it is imperative that researchers explore different avenues so that answers can be found.

There is a wide body of research on the prevalence of mental health. According to research done by the Association for University and College Counseling Center Directors or AUCCCD (2015) many students suffer from psychological disturbances. In addition, many of these studies show the prevalence of mental health concerns in the student body of undergraduate students. However, very few of these studies seek to observe the effect of psychological risk factors; specifically, on academic performance. They also do not seek to observe the presence of multiple risk factors and how they can affect college students academically. Academic adjustment is an integral part of the college student. The presence of psychological distresses that a student experiences, represent invisible barriers preventing the student from achieving success. According to Anderson, Guan, & Koc (2016), a student is more effective when they can balance their social, psychological, and scholarly education. The more effective a student is at balancing; the more success

they achieve when attempting a college sojourn. Therefore, academic adjustment is a crucial part of understanding the students' ability to succeed in college.

Early research on the overall success of college students was merely focused on academic abilities. It did not consider other factors such as mental health issues that could affect the progress of a student. This is not the case of present day studies as researchers now understand that academic ability is just one of the aspects of a successful transition into college (Guan et al., 2016). The result of a successful college transition requires the student to have a solid foundation upon which they can construct success. In view of the aforementioned ideas, the purpose of this study was to assess the relationship of psychological distress and academic adjustment among college students in a public university.

Research Questions

To achieve the purpose of this study, the following questions were addressed:

- 1) How do students assess their psychological distress?
- 2) How do students assess their academic adjustment?
- 3) What is the correlation between psychological distress and academic adjustment?

Hypothesis

The hypothesis advanced for this study was that, there is a significant correlation between psychological distress and academic adjustment in college students. That is, students who report mental health problems are more likely experience academic adjustment concerns.

Significance of the Study

The study hoped to provide a multidimensional perspective of understanding psychological distress and how it can impact academic functioning of college students. Targeting specific mental health concerns that can hinder college success is important in providing effective interventions and support services for students. Results of the study can heighten awareness of students and stakeholders in colleges and university on causes or triggers of mental health problems and thereby, expand resources and services on campuses that serve as protective factors for students' mental health and academic well-being.

Limitations

There were some shortcomings in the conduct of the study.

- 1) Psychological distress is a broad concept that is synonymous to mental health symptoms or issues. In this study, psychological distress comprises of seven areas only that include: depression, generalized anxiety, social anxiety, academic distress, hostility, eating concerns, and alcohol use.
- 2) The Academic Adjustment Scale (AAS: Anderson, Guan, & Koc, 2016) used in this study was primarily developed using sample of Australian and Chinese immigrant college students but not with college students in the US. Item content and criterion validity of the AAS may be a limitation for students in the US just like the sample for this study.

- 3) Most studies commonly use grade point average (GPA) as an accurate indicator of academic adjustment of students. This study did not use GPA but instead, use a self-report measure of academic adjustment, which may be influenced by response bias.
- 4) Psychological distress and academic adjustment may vary in terms of personal and sociodemographic factors like age, gender, or socioeconomic status of students. The possible moderating or mediating role of these factors were not assessed when investigating the relationship of psychological distress and academic adjustment.
- 5) Participants were recruited from a single public university located in the northeastern part of the US. Findings of the study may only be true to the sample and cannot be applicable to all college students in US.

Assumptions

The study was built upon the following assumptions:

- 1) Psychological distress and academic adjustment are constructs that can be defined and measured in various ways. It was assumed that these constructs have broad conceptualizations that reflect current theoretical and empirical perspectives.
- 2) The study used self-report measures of psychological distress and academic adjustment. It was assumed that students were honest and sincere in responding to the items/questions on these measures.

- 3) The measures of psychological distress (i.e., Counseling Center Assessment of Psychological Symptoms- 34: CCAPS-34) and the academic adjustment (Academic Adjustment Scale: AAS) were developed for use with college students. It was assumed that the items/questions contained on these measures were representative and relevant to experiences of college students.

Definition of Terms

- Academic lifestyle. A domain in academic adjustment that refers to the match of a person's thoughts and actions to his/her temporary role as college student (Anderson, Guan, & Koc, 2016).
- Academic achievement. A domain in academic adjustment that refers to college student's satisfaction with his/her academic progress and performance (Anderson, Guan, & Koc, 2016).
- Academic motivation. A domain in academic adjustment that refers to a student interest and goal to persist in college (Anderson, Guan, & Koc, 2016).
- Alcohol use. A domain on the CCAPS-34 which refers to using alcohol more than one should, black out symptoms due to alcohol use, enjoyment associated with being drunk, and regrets due to events related to drinking (Center of Collegiate Mental Health, 2015).
- Depression. A domain on the CCAPS-34 which refers to feelings of isolation, worthlessness, lack of enjoyment and hope, sadness, and suicidal ideation (Center for Collegiate Mental Health, 2015).

- Eating concerns. A domain on CCAPS-34 which refers to preoccupation with food, worrying about eating too much, and feeling lack of control when eating (Anderson, Guan, & Koc, 2016).
- Generalized anxiety. A domain on the CCAPS-34 which refers to racing thoughts, sleep difficulties, tension, racing heart, and panic attacks or fear of panic attacks (Anderson, Guan, & Koc, 2016).
- Hostility. A domain on the CCAPS-34 which refers to difficulty controlling temper, thoughts of hurting others, fear of acting out violently, frequently getting into arguments, feeling easily angered, and the desire to break things (Anderson, Guan, & Koc, 2016).
- Social anxiety. A domain on the CCAPS-34 which refers to shyness, ability to make friends easily, feeling self-conscious, and feeling discomfort around people (Anderson, Guan, & Koc, 2016).

Overview of the Study

Chapter 2 includes a literature review on the psychological distress and academic adjustment. Chapter 3 describes the methodology in terms of participants, measurement of primary variables, data gathering procedures, and analytical strategies for the data collected. Chapter 4 reports the statistical findings of the study presented in tables and their interpretations. Finally, Chapter 5 provides a discussion of results as well as the conclusion and recommendation for future studies.

Chapter 2

Literature Review

Psychological Distress in College Students

Alcohol use. Alcohol use is one of the most complicated psychological stressors observed in this report. Its history in research in psychology has long since been explored. Alcohol use is one of the most common risk factors that people associate with college students. It is a major cause of concern on college campuses, as more and more individual engage in reckless activities while under its influence. In a study conducted by Fuentes & Hoffman (2016), researchers examined a group of college students on wet and dry campuses. A wet campus allows drinking on residence halls, while a dry campus does not. They found that 68 percent of the students surveyed, experienced problems with alcohol dependence, alcohol abuse, and problematic drinking (Fuentes & Hoffman, 2016). Many of the issues that result in alcohol abuse, can become life threatening. In addition, it can involve other negative consequences that involve the law. However, most of the issues that arise within college campuses affect college students at an academic level. According to Piazza-Gardner, Barry, & Merianos (2016), students were much more likely to end up missing classes and falling behind in school due to excessive alcohol consumption. Their study was one of the first the observed a negative correlation between GPA, and the amount of alcohol consumed by students. Interestingly enough, there is a lack of research based on the effects of alcohol and its effects on academic performance (Piazza-Gardener et al., 2016). Because of this, it is evident that more studies need to be conducted in order to asses a causal relationship. Piazza-Gardener et al. (2016) study was

conducted by using the ACHA's National College Health Assessment information. The NCHA has a wide variety of information that assesses the student populations behavior. Some of the items on the list observed drinking behavior, sexual activity, drug use, and physical activity. However, this study only chose to observe alcohol use, and its effects on academic performance. It would have been interesting to observe the effects of multiple student behaviors/conditions and their relationship with academic performance. The research in this area is lacking as well. There are a few reasons as to why many studies do not observe multiple factors. The first reason may be due to the fact that observing multiple variables can become quite time consuming for test subjects as well as researchers. Another reason may be due to the fact that there are many variables which can have negative impacts on the students' academic career; making it hard to determine which ones are necessary to study. The current research seeks to eliminate some of these problems by using scales that are precise, time efficient, and stable enough for retesting purposes.

Coincidentally enough, studies that seek to observe multiple risk factors are extremely uncommon. In addition to this problem, Piazza Gardener's et al. (2016) study on the use of alcohol in college students was only compared to the approximate GPA, and by no other means. This is a problem because we now know there are multiple domains which assess a student's overall achievement in school. According to Anderson, Guan, & Koc (2016), early research was only concerned with academic abilities. In concordance with this concept, GPA was the only measurement of academic abilities that was used to assess students in Piazza-Gardener's et al. (2016) study. Despite the studies recent

development, it seems that this old habit is still present in current research. The researchers were however cognizant enough to notify this as a limitation of the study.

It should also be noted that different viewpoints on GPA can cause for a variety of issues. For example, some students who have majors that are considered “more challenging” than others might be shown more leniency based on lower grades. Also, students may have suppressed feelings as to whether or not they chose the right major; causing them to do worse in a field in which they may have no real interest in. Conversely, a student may be doing exceptionally well in their major, while severely under-performing in other areas of academics. The effects of alcohol on GPA may be skewed for students such as this. Furthermore, the questionnaire in this study was given at the beginning of the fall semester. Incoming freshman students may not have a grade for their current school year. Despite this, a total of 27,774 students were gathered from 44 college campuses across the United States. Because of this large sample size, researchers were able to assess some correlates towards the use of alcohol and its negative effects on academic performance.

When examining the effects of alcohol in their studies, researchers often run into trouble. Most of the information that was previously gathered for research, merely involves examining the prevalence of college drinking. In addition, there are many different definitions that involve the consumption of alcohol. For example, there are many different definitions of binge drinking. The National Institute on Alcohol Abuse and Alcoholism or NIAAA (2016) lists three different descriptions of binge drinking on their website. Each definition is different, because each one is listed by a different organization. Different studies use different definitions of alcohol use. Because of this, it

makes it even harder for researchers to establish a universal causality between drinking behaviors, and its effects on academics. Piazza-Gardener's et al. (2016) study used only two types of determinants based on alcohol use. The first question asked how many drinks a person consumed when they attended their last social event; ranging from a scale of 0 to 99. The next question asked whether they had five or more drinks in one sitting over the last 2 weeks. Frequency was measured on a scale of 1 time, 2 times, 9 times and 10 or more times. Despite this glaring factor in finding a universal determinant for alcohol use, many studies do elicit a negative correlation between alcohol use and academic success. In the research done by Piazza-Gardener et al. (2016), it was concluded that there was a negative relationship between GPA, and the amount of alcohol consumed. Despite some of these issues that are present in current research, this study takes a step in the right direction. In most studies, many sample sizes are small, and the studies conducted usually do not include college undergraduate students (Piazza-Gardener et al., 2016). As stated before, very few studies compare alcohol use, to academic performance. Their study was able to conclude that excessive and frequent drinking showed a decrease in academic performance. In contrast, students who remained abstinent from alcohol had higher GPA's (Piazza-Gardener et al., 2016). This study was crucial in understanding the basic principles of alcohol use and its effect on student academics. Despite this, the study made it very clear that there was a lack of current research in this area. In addition, more large scale longitudinal approaches need to be conducted in order to make significant progress.

Although some of the research on alcohol and its effect on academic achievement is lacking, it is important to identify the prevalence of drinking in college campuses.

The definition of alcohol use can range from the frequency and amount of alcohol drunk, to the feelings in which people experience the day after they drink. Binge drinking is frequently included in most older studies. However, its definition has changed over the years. In research done by Cranford, McCabe, & Boyd (2006), it was concluded that college students were more at risk in reference to binge drinking than previously thought. To the extent of this researcher's knowledge, it is also one of the only studies which examines multiple measures for the use of alcohol. Current research is moving away from using the definition of binge drinking as a measurement. Although Cranford et al. (2007), were not aware of this impending transition, it clearly demonstrates some of the complications that can arise when studies measure alcohol use. The first known definition of alcohol use was stated to be the consumption of 5 or more drinks in one sitting. This type of drinking was first identified in 1969 (Cranford et al., 2007). The next definition of alcohol use, additionally included a time period of whether or not they exhibited this pattern of behavior within 2 weeks. They also referred to this behavior as binge drinking. In the 1990's, a new term of binge drinking was developed which accounted for gender specificity. Instead of 5 drinks or more drinks (which was specified for men), women were now specifically accounted for. Females engaged in this process when they had 4 or more drinks. The definition of binge drinking at the time of this study, accounts for all of the previous factors recently mentioned, and adds on a time frame of two weeks. However, the researchers believed that this NIAAA definition of binge drinking is inaccurate. It stated that the consumption of 5/4 or more drinks within one occasion, in the previous 2 weeks (Cranford et al., 2007). The reasons for this are numbered. Ideas such as the inability to measure BAC, in addition to the inability to

measure the length of the episode in which binge drinking occurs are just a few examples. It should be noted that the current NIAAA (2016) measure includes binge drinking as BAC levels of %0.08 and above. At the time of this study, Cranford et al. (2007) developed a new measurement. It changed the 2-week period into a 12-month time frame. They tested students using both the 2-week and 12-month time frame. In addition to this, researchers also included other questionnaires which looked at the age of drinking onset, as well as the past year negative consequences. They also included a question that measured the amount of drinks an individual consumed in a 2-hour period over the past year. Finally, researchers also included the CAGE questionnaire. It is a short questionnaire that is used to assess the possibility of a drinking problem (Cranford et al., 2007).

According to comparison between the 2 and 12 week measurements, drinking rates jumped from 52.3% to 63.6% (Cranford et al., 2016). In conclusion, the 2-week measure did not incorporate those who drank excessively before the 2-week time period. This accounted for the 9.9% increase in binge drinking. Widening the category to the inclusion of a year, significantly increased the previously purposed amount of binge drinkers. The researchers of this study also compared the 2-week and 12-month time frame, with results obtained by the other questionnaires. It was generally concluded that there was a significant correlation between the 12-month test and the other questionnaires that were provided. However, they were not as statistically significant as the 2 week measurements. This study allowed for the inclusion of a longer time frame in which binge drinking could possibly occur. The current NIAAA (2017) definition of binge drinking does not include an overall time frame; but merely states that it is a pattern.

Although the present study does not seek to improve upon finding the exact definition of binge drinking, it is important to bring to light some of the issues that are still present within the research community pertaining to alcohol related issues. There are overlaps in definitions such as alcohol abuse, alcohol use disorder, alcoholism, and binge drinking. The current study seeks to use a wider encompassing measurement which does not include the definition of binge drinking. Binge drinking is especially hard to use in current day research because of lack of definitional precision. Even the modern definition from the NIAAA (2016) has its flaws.

In conclusion, Cranford's (et al., 2007) study was significant because it solidifies the idea that criteria within regards to alcohol use needs to be more concrete. In addition, it shows how problematic drinking issues are on college campuses despite which measure is used. Despite this, there are some issues with the study. For example, researchers used additional questionnaires which included measurements that assessed a wide variety of definitions that observed alcohol use. Regardless of this, they used binge drinking as the final assessment as a comparison for accuracy. Even though their 12-month time frame had some statistical significance with other questionnaires, it was unable to achieve the same statistical significance as the 2-week time frame measurement. Due to this, it may be insignificant that their 12-month measurement produced a widened category of binge drinking. This 12-month time frame measurement would also conflict with today's current standards of binge drinking as well. A person who engages in binge through the course of a year, may not be developing a pattern (which is stated in the new definition). Therefore, it is clear that the definition of binge drinking changes frequently with more emphasis being placed on the development of negative drinking patterns and feeling

towards drinking. Current research focuses more upon negative feeling associated with drinking as well as its frequency. Because of this, more accurate results may be obtained.

Eating concerns. There is not much research that compares eating concerns, with academic performance. It is a fairly recent topic in which researchers are starting to uncover. Eating concerns are varied and can include a variety of unhealthy habits. In addition, eating concerns are usually combined with other long lasting psychiatric issues Yanover & Thompson (2008). Despite this lack of research, a study conducted by Yanover & Thompson (2008) observed eating concerns and academic performance in college students. They stated that previous research has observed the correlation between eating problems and its link between cognitive performance. In addition to this, problem solving abilities were also affected by acute eating disturbances (Yanover & Thompson 2008). Binge eating, purging, and other psychological issues involving negative views of one's weight might all play a role in academic achievement. For the purpose of this study, Yanover & Thompson (2008) designed a new scale called the Eating and Body Image Disturbances Academic Interference Scale (EBIDIAS). They used measurements that observed the key features in eating disorders. They included a drive for thinness, bulimic symptoms, perfectionism, and body dissatisfaction. Each sub scale was observed through an online test sent through mass email. These sub-scales were then compared to GPA on a 4.0 scale.

Researchers observed that there was a correlation between EBIDAS and GPA (Yanover & Thompson, 2007). Overall, the effect size was small based on people who fell within normal ranges of the EBIDAS. However, those who scored higher on the EBIDIAS had lower overall academic achievement (Yanover & Thompson, 2007). This

study was crucial because it provided a possible link between academic achievement, eating concerns, and overall body image. In addition, the sample size was larger enough to conclude the possible existence of this correlation. To the extent of this researcher's knowledge, it is the only study which observes a possible link between eating concerns and academic achievement. More research clearly needs to be in this avenue of study. Regardless of this, the study used GPA as a measurement for academic achievement. The study makes note of several behavioral problems that are consistent with low self-esteem. Refusing to eat, purging, and overeating, are just a few of these examples (Yanover & Thompson, 2008). It would be interesting to see whether this type of behavior transfers over into Anderson's et al. (2015) measurement of academic adjustment. Some of the questions in the measurement pertain to levels of motivation and self-efficacy. Perhaps it is possible that self-esteem might overlap with a couple of these questions to produce a correlation between them. Regardless, Yanover & Thompson's (2008), work is becoming outdated. Possible future studies may want to include measurements for perceived self-efficacy in regard to academic success.

Since research concerning eating disorders and academic success are sparse, looking at prevalence rates in college students might lead to a better understanding of the disturbance. According to Nelson, Castonguay, & Locke (2011) eating concerns are notoriously present within college students. However, many students are too ashamed to admit they have issues concerning their weight. Most cases of body image concerns go unreported due to this.

Depression. College campuses represent a transition phase in many students lives. Some can handle the stress, while other have trouble coping with their new

environment. Depression is a common mental health concern which can affect the lives of many college students. The research stated that the effects of depression are present in approximately 19 million Americans (Deroma, Leach, & Leverett 2009). However, the presence of depression in college seemed more shocking. Researchers stated that depression is present in nearly 50% percent of all college students. With these statistics, it is easy to understand why colleges have issues obtaining the appropriate staff who are ready to give council to misguided students. Even though depression is common, it can be hard to diagnose the issue. This is due to the fact that depression takes on a transitional approach between the individual and their environment (Deroma et al., 2009). Certain factors may provide varying levels of stress to the individual resulting in depression. According to the study, the most common forms of depression arise from academic performance, social stress, and financial issues (Deroma et al, 2009). Based on this argument, it would be assumed that depression causes a decrease in academic performance. However, the article goes on to state that the systematic observation between depression and academic performance has led to mixed results (Deroma et al., 2009).

The findings of this study were essential in assessing the link between mental health and academic performance. The study observed a population consisting of 164 students in a military college. Students were measured using the Beck Depression Inventory II; a reliable for of measurement. Students where then asked to report their cumulative GPA. The study found that the college students who exhibited symptoms synonymous with depression lower GPA (Deroma et al., 2009). It is important to note

that Deroma et al. (2009) clearly stated that although their study was significant, the correlation between depressive symptoms and academic functioning is not clear.

The dimension of depression is hard to examine specifically because it can be due to a variety of factors. In addition, the current research in the field is unable to establish whether depression yield negative academic performance or vice versa. Contributing factors based on optimism as well as the view of oneself may also have an effect on the academic achievement of the student. Optimistic views of oneself contributes to positive psychological adjustment (Deroma et al., 2009). This can help students adjust to the academic demands that they will experience throughout their collegiate career. This is why the present study uses the Academic Adjustment Scale created by Anderson et al. (2016). The tests consist of questions that are based on motivation and self-efficacy within regards to the field of academics. Regardless there is a need for a longitudinal study that observes depression and academic achievement in college students; from their incoming year, to graduation. Although the current study is not longitudinal, it provides more information within the field of depression. In addition, it solidifies the belief that academic success is also determined by motivation, self- confidence in abilities.

Hostility. Hostility is a well observed trait in the field of psychology. In regard to college students, most of the information that has been documented usually relates to violence as a result from drinking, or other emotional problems. Unfortunately, there is lacking research on hostility displayed by college students, and its effect on the academic adjustment. However, there is research that examines overall conflict within younger children and its effect on their academic attainment. In research conducted by Harold, Aitken, & Shelton (2007), there has been significant findings in regard to children who

experience inter-parental conflict and its effect on their academic achievement. Even though college students were not the individuals being observed in this report, it can be related to the current study as it observes the negative impact hostility has on an individual.

Parental separation, and inter parental conflict, can have an incredibly negative effect on the developing child. According to Harold et al. (2007), the adjustment process of parental separation directly correlates with the amount of hostility experienced by the child. Marital separation can include a long and drawn out process. Therefore, it is not uncommon for families to experience many different types of risk factors while undergoing the separation process. According to Harold et al. (2007), they include “economic stress, parent depression, and negative parenting”. Although these distressors may affect the child, they do not always lead to adverse effects. However, conflict that occurs between parents has always been found to lead to adverse effects within children (Harold et al., 2007). Because of this, inter-parental conflict is the most adverse risk factor for the child.

Inter-parental conflict and its negative effect on children has been observed since the 1930's (Harold et al., 2007). Much of the data includes how the children view themselves because of the parental conflict. In addition, the data looks at how hostility can be transferred into the lives of the children. This conflict between parents can cause them to become closed off, and emotionally unresponsive to the child's needs. This may be due to the fact that children will see their parent's relationship as a reflection of themselves. Furthermore, hostility between parents can occur both overtly, as well as covertly. According to Harold et al. (2007) original research observed how overt and

covert inter-parental conflict affected the child. It has been documented that overt inter-parental conflict was much more detrimental to the child, compared to covert parenting. Even though this may be true, this original hypothesis was lacking. It does not expand upon the cognitive and emotional factors in which might affect the child. In addition, it did not observe how this hostility could manifest itself through externalizing behavior. Finally, it did not provide an extensive examination as to how a child appraises conflict.

This old hypothesis of overt conflict, gave rise to another. According to Grych, & Fincham (2000), children who viewed conflict as a threat to themselves, their parents, or their families, were much more likely to experience distress. In addition, it offered a transactional model. It proposed that “that children’s appraisals of threat and self-blame mediate the association between children’s observation of conflict and internalizing problems” (Grych & Fincham 2000). The findings of this theory supported the hypothesis as well as the model.

This model was later incorporated into the study done by Harold et al. (2007). Since researchers wanted to examine the effects of hostility on overall academic achievement, a new model had to be created. Many studies have supported the link between the child's assessment of conflict, parental conflict, and their link to the child's well-being. However very few have moved past this observation. More studies need to be developed that expand beyond the impact of simple conflict appraisals. New arenas need to be explored that observe conflict and its effects on other aspects of a child's lives. At the time, Harold et al. (2007) conducted his research, he stated that there was little research that observed inter parental hostility, and its relationship to long-term academic achievement. Similarly, current researchers found, no other research that

specifically links hostility and academic adjustment in college students. Even though Harold's et al. (2007) research observes inter-parental conflict and academic achievement in children (as opposed to hostility and academic adjustments in college students), it is essential in its inclusion of literature review. The model specifically observes “the theoretical relationship between inter-parental conflict, children's aggressive behavior, negative parenting behavior, appraisals of self-blame for parents' marital arguments, (and its relationship to) and low academic attainment (Harold et al., 2007). In addition, the model includes an assessment which contains a teacher report of the child's aggression. This assessment is crucial because it potentially links children's aggressive behavior, to their long-term academic success. Finally, this study is important to current research because it examines there may be a link between self-appraisals and long term academic achievement.

The study observed a total of 230 students, aged 11-13. The study examines the children using a three-wave longitudinal test. Initially, parents and students were invited to participate in the research. They attended a meeting which outline the study. Afterwards, they were give a consent form. Through the course of the study parents received questionnaires that assessed various aspects of home life. These questions mainly focused on the family's interaction with each other, parenting, marital satisfaction, children and parent's psychological health, and family demographics. Children also received packets similar to this, but were asked to complete them at school. Finally, teachers were also given questionnaire that observed a child's psychological functioning. Over the course of the study, children were graded on 3 subjects (math, English, and science) which were derived from standardized tests.

According to Harold et al. (2007), children who lived in households with high inter-parental conflict can have significantly low academic attainment. The study also reinforces the idea that negative self-appraisals factors which can be attributed inter-parental conflict and academic achievement. This included negative self-appraisals, hostile and rejective parenting, and high inter-parental conflict. This study was crucial due to the fact that it reinforced current ideas of self-appraisals and conflict. In addition, it paved the way for research that focuses on hostility and its connection with academic achievement. A major strength of this study was that, it was longitudinal in its analysis. In addition, it purported a transnational model which could be tested at different starting points. For example, researchers could examine whether negative parenting behavior, was directly associated with teacher reports of aggression. This flexible model, can be implemented in future studies that seek to replicate or disprove results. One drawback of this test was that it did not examine children for long periods of time. The longitudinal design of the test only lasted for three years. It is quite possible that some children changed the course of their academic career. Future research should be devoted to hostility and its effect on academic achievement. Because there are very limited studies, no concrete theories have been purposed.

In conclusion, it is interesting to note, how much the transnational model interacts with itself. Due to this factor, the study shows how deep hostility may run in an individual. In addition, there may be compounding affects that cause an individual to act in a hostile manner. Much like the findings of the study, it is quite possible that negative self-appraisals may cause college students to have high levels of hostility. This could elicit a domino effect which leads to low levels of academic adjustment.

Anxiety. Anxiety is not an uncommon psychological distress in the college population. According to Kanuri, Taylor, Cohen, & Newman (2015), anxiety is one of the most commonly diagnosed forms of psychiatric disorders. In addition, it oftentimes goes diagnosed and untreated within the college population. Kanuri et al. (2015), mentions a variety of eye opening facts regarding generalized anxiety disorder (GAD). The first is that anxiety usually onsets at the age of twenty. Due to this factor, college students are excellent candidates for studies associated with GAD. In addition, it is possible that college students tend to deal with anxiety more often than their non-collegiate counterparts. Added anxiety could include daily life distressors, in addition to learning how to balance their academic, social, a family life. Regardless Kanuri et al. (2015) purposes that the effects of anxiety can persist well into adulthood. Increased levels of expenditure on the individual's health is not uncommon. For individuals with lowered quality of life as a result of GAD, healthcare costs oftentimes double (Kanuri et al., 2015). Finally generalized anxiety disorder also leads to greater issues with substance abuse and impulse control (Kanuri et al., 2015). Due to these negative consequences associated with GAD, individuals with the disorder should seek help immediately. On the contrary, many people oftentimes do not seek help. People who have GADs' may not realize that they are affected by the disorder (Kanuri et al., 2015). Kanuri et al. (2015) maintains that individuals with GAD often do not seek treatment due to lack of time restraints, the stigma attached to being sick, and subsequent costs of treatment. Whatever the case may be, GAD is a life altering disorder than needs to be treated on college campuses.

As stated before, Anxiety is an incredibly diverse psychological stress factor. There are some studies that observe its effects on students' academic achievement. However, these findings show that there are some mixed viewpoints as to how anxiety affects a student's success in academia. This might be due to the fact that anxiety can be observed as either "good" or "bad". In addition, there are different forms of anxiety that can be reported within an individual. This makes anxiety an extremely complicated variable when being observed in an academic setting. Results can yield both positive and negative effects in regard to academic achievement. In a study conducted by Hartman, Waseleski & Whatley (2017), researchers examined the effect of emotional dysregulation and test anxiety on GPA. Emotional dysregulation was described as "the inability to be aware of and understand emotions, to accept those emotions, to control impulsive behavior and work toward goals when facing emotions (Hartman et al., 2017)". In addition, individuals with emotional dysregulation also have greater emotional sensitivity. Because of emotional dysregulation, researchers proposed that those who experience test anxiety, might experience it much more than the average individual. Hartman's et al. (2017) study also stated that individuals who have emotional dysregulation problems, have increased trouble in the academic and social arena as well.

An individual's cognitive resources are finite. Hartman et al. (2017) proposed that individuals with emotional dysregulation have trouble balancing emotions. Therefore, they have fewer resources to put towards academics. Because anxiety is an emotion experienced as a result of nervousness, one could propose that emotional dysregulation could exacerbate the effects. Test anxiety is experienced when an individual maintains negative associations before, during, and after an evaluative process (Hartman et al.,

2017). As we know, college is a stressful time for many students. Many students take tests multiple times throughout the course of the semester. Because test anxiety can linger longer after the test has been taken, it is possibility that this anxiety can manifest itself into a reoccurring form of anxiety. Regardless of the case, test anxiety prevents the individual from performing to their fullest extent. Individuals oftentimes ruminate, and perform below the expected standard (Hartman et al., 2017).

The first objective of this study was to find out whether emotional dysregulation predicted for test anxiety. The second objective focused on whether or not test anxiety, as well as emotional dysregulation had an effect on overall GPA (Hartman et al., 2017). Researchers recruited 191 college students to participate in the study. Students first completed the emotional regulation scale (DERS). The DERS measure and individual based on six sub-scales. These sub-scales include “the nonacceptance of emotional responses, difficulties engaging in goal-directed behavior, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity” (Hartman et al., 2017). Students then took a test that observed their anxiety called the Cognitive Test Anxiety Scale. This test observed the presence of irrelevant thoughts that prevented an individual from completing a test. Lastly, students were asked to record their GPA.

The results of this study provided for interesting content. According to Hartman et al. (2017) study, emotional regulation was predictive for test anxiety. Therefore, those who scored high on emotional dysregulation, also scored high on issues involving test anxiety. This finding is important for a variety of reasons. According to Hartman et al. (2017) it shows that individual who scores high on both emotional regulation and test

anxiety, have issues focusing on the task at hand. Second, all four subscales that were used in the DERS predicted anxiety (Hartman et al., 2017). It reveals that there may be some underlining cognitive mechanisms that intrinsically link the two together. Furthermore, this could mean that emotional dysregulation can act as a “switch” that activates anxiety in the cognitive process. It could be possible that individuals who have trouble regulating their emotions may transfer anxiety into other arenas of their life. Further research should be conducted which examines emotional regulation and different types of anxiety.

Interestingly enough, high levels of emotional dysregulation and test anxiety, did not predict a low GPA. This finding is crucial because it reveals an unexpected twist. Hartman et al. (2017) proposed that in an individual has a finite amount of cognitive resources available when completing a task. If an individual expends most of their cognitive resources (while also undergoing test anxiety) focusing on abstract thoughts while taking a test; theoretically they should have a consistently lowered GPA's. Even though the present researcher is measuring academic adjustment (and not overall GPA), the findings are relevant. Most importantly, it contends with the current researchers' present belief. It suggests that there may be certain distressors (experienced in small doses) that can actually help a student do well. Despite this, there is one obvious limitation to this study. Self-reports were used in all of these tests. It could be possible that students increased their GPA. Regardless this test was important for revealing a link between anxiety and academic adjustment.

Academic adjustment. There has always been a need to measure a student's performance in school. Measurements of success are invaluable information for the student as well as for their schools. However, much like alcohol use, the its definition has changed considerably. In the past, academic success was only measured by GPA or academic achievement (Anderson et al., 2016). Academic ability was the only thing that was considered to be of importance to researchers at that time. We now see the student as a much more complicated and interconnected individual. This view is representative of a more holistic approach of how we gauge the level of success in a student's endeavors. In their study, Anderson et al. (2016) set out to find a more accurate way to measure the school success of a student. As a result, the academic adjustment scale was created. The current researcher chose this scale because it did not provide a snapshot of "success." Instead, it takes on a more dynamic role of assessing the nature of the student and how it is invariably linked to their success. In their study, Anderson et al. (2016) also wanted the scale to measure the aptitude of college sojourners. Anderson's et al. (2016) study describes sojourners as students who transition from one country to another, with the intent of developing and maintaining a college career. This transitional process can be exceptionally hard on the student that may result in a "culture shock." Because of this, researchers wanted to find an accurate measurement for obtaining a way to measure the overall adjustment of the student and their endeavors. The Academic Adjustment Scale (AAS) includes a variety of questions that contain a measurement of the student's lifestyles, achievements, and satisfaction. These three components can be considered as accurate representation of the student sojourners' school adjustment. These aspects are thought to be essential in determining the success of the student. Initial use of the AAS

indicated that the instrument is psychometrically valid and reliable to assess academic performance of international college students (Anderson et al., 2016).

The transitional process from secondary education into a university setting has been an important factor in understanding academic adjustment. According to van Rooij, Jansen, and van der Grit (2017), there are a variety of characteristics that can determine students' success in their first year of college. Much like the study performed by Anderson et al. (2016), van Rooij et al. (2017) believed that a successful academic transition was composed of multiple factors and not just GPA. College transition may require behavior, cognitive and intellectual engagement. This study focused on the importance of the transitional phase students experience when completing 12th grade and starting college. Many students often times dropout or change their majors after the first year of college. According to van Rooij et al. (2017), dropout rates and change of major can correlate with how students were prepared in the transitional process. That means that a student with a higher level of readiness within the school engagement process may experience less strife while undergoing the transitional phase. Behavioral engagement was composed of factors that examined effort, attendance, time on task and persistence. According to researchers (van Rooij et al., 2017) these were all solid indicators of academic achievement. Cognitive engagement was composed of ways in which the student learns. This represented whether the student grasped the information that was being taught, the level at which the student explored the material, self-efficacy, and the learning approaches in which the student used to understand the material (van Rooij et al. 2017). These subcategories basically focused upon the quality in which the student understand the material. Lastly, intellectual engagement was composed of feeling in

which the student held towards the subject at hand. It also examines whether there is an interest in the value of the education in which the student is receiving.

Among the categories of school engagement, behavioral and cognitive engagement were perceived to significantly impact students' academic achievement. Students that scored low on these areas of engagement were more likely to have performance issues in school (van Rooij et al., 2017). In addition, their academic achievement and their adjustment to the school system was much lower compared to their peers (van Rooij et al. 2017).

Chapter 3

Method

Setting and Participants

The study was conducted in a public university located in the northeast region. The university offers undergraduate and graduate programs and approximately 15,300 students were enrolled in the fall semester of 2016.

A total of 31 undergraduate students completed an online survey for the study. As shown in the demographic profile of participants displayed in Table 1, there were 18 females and 13 males comprising the sample, with a mean age of 19.61 years. Racial/ethnic background of the participants was diverse that included: 22 Whites, 3 African Americans, 2 Asian Americans, and 4 Native Hawaiian/other Pacific Islanders. Participants' programs of study included business, communication and creative arts, education, engineering, humanities and social sciences, performing arts, sciences and math, and health professions.

Table 1

Demographic Profile of Participants (N = 31)

<i>Variable</i>	<i>f</i>	<i>%</i>
<i>Age (in years)</i>		
18	5	16.1
19	11	35.5
20	9	29
21	4	12.9
22	1	3.2
23	1	3.2
<i>Gender</i>		
Male	18	58.1
Female	13	41.9
<i>Race/Ethnicity</i>		
African American	3	9.7
Asian American	2	6.5
White	22	71
Native Hawaiian/Other Pacific Islander	4	12.9
<i>Program of study</i>		
Business	8	25.8
Communication & Creative Arts	2	6.5
Education	1	3.2
Engineering	4	12.9
Humanities and Social Sciences	8	25.8
Performing Arts	1	3.2
Sciences and Math	4	12.9
Health Professions	3	9.7

Measures**Counseling Center Assessment of Psychological Symptoms-34 (CCAPS-34).**

The CCAPS-34 is a questionnaire that contains 34 items that assess psychological distressors that are present in an individual. It was a brief version of the CCAPS-62 (Locke et al., 2012). CCAPS-34 includes scales on depression, social anxiety, general anxiety, hostility, eating concerns, alcohol use, and academic concerns (Locke et al., 2012). Response options range from 0 (Not at all like me) to 4 (Extremely like me).

Since academic concerns scale was not included in this study, the total items of the CCAPS used was 30.

Academic Adjustment Scale (AAS). The AAS was developed by Anderson et al. (2016) which focused on multiple levels of development within the typical college student. The scale was originally intended to measure academic perceptions of sojourn students in tertiary education. It consists of nine items, with three items each measuring academic lifestyle, academic achievement, and academic motivation. Item response follows a Likert-type options ranging from 1 (Rarely applies to me) to 5 (Always applies to me).

Demographic survey. The demographic survey was intended to collect information about participant's age, gender, ethnicity, and program of study.

Procedures

The study sought IRB approval from the Rowan University Office of Research Compliance. Data gathering was done through an anonymous online survey powered by QUALTRICS. The survey included an introductory page that described the study and a consent form that required a student's agreement to participate in the study. Once consent is granted, student was instructed to complete three sections of the survey consisting of the CCAPS-34, AAS, and demographic information. The entire survey can be completed in approximately 10 minutes.

Data Analysis

Data analysis involved the use of statistical procedures that were conducted through SPSS version 24. Descriptive statistics consisting of the mean, standard

deviation, frequency distribution, skewness, and kurtosis were calculated for all the variables in the study.

To test the hypothesis on the relationship of psychological distress and academic adjustment, Pearson correlation was calculated and the resulting correlation coefficients were interpreted in terms of the following effect sizes: .10- small, .30- medium, and .50- large. A $p \leq .05$ was set as criterion for statistical significant of correlation coefficient.

Chapter 4

Results

Descriptive Statistics

Preliminary analyses of the psychological distress and academic adjustment consisted of calculating the mean and standard deviation as measure of average and variability, respectively. In addition, skewness and kurtosis were calculated to determine normality of score distribution of psychological distress and academic adjustment. The calculated values of skewness and kurtosis of all the variables were within the range of -2 and +2, which suggest that score distributions of the variables met normality assumptions (Meyers, Gamst, & Guarino 2017). Table 2 displays the descriptive statistics of the variables.

Table 2

Descriptive Statistics of Academic Adjustment and Psychological Distress

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>
Academic adjustment	3.88	.58	-.43	-.34
Depression	1.61	0.8	1.2	-.14
Generalized anxiety	2.02	0.92	0.83	-0.32
Social anxiety	2.7	0.81	0.39	0.02
Eating Concerns	1.54	0.77	2.06	3.95
Hostility	1.62	0.63	1.23	1.27
Alcohol Use	1.81	0.84	1.35	1.46

Correlation Between Psychological Distress and Academic Adjustment

Table 3 presents the bivariate correlations between psychological distress and academic adjustment that were derived from Pearson r calculations. Among the six psychological distress factors, depression [$r(29) = -.56, p = .001$], generalized anxiety [$r(29) = -.46, p = .01$], social anxiety [$r(29) = -.37, p = .04$], and eating concerns [$r(29) = -.35, p = .05$] were significantly associated with academic adjustment. The significant correlations, which have effect sizes ranging from medium to large, suggest that students scoring low on depression, generalized anxiety, social anxiety, and eating concerns on the CCAPS-34 tended to score high on academic adjustment on the AAS. Conversely, students scoring high on depression, generalized anxiety, social anxiety, and eating concerns tended to score low on academic adjustment

Psychological distress factors of hostility [$r(29) = -.26, p = .17$] and alcohol use [$r(29) = -.10, p = .58$] were not significantly associated with academic adjustment.

Hence, the hypothesis predicting significant correlation between psychological distress and academic adjustment in college students was supported most notably for depression, generalized anxiety, social anxiety, and eating concerns.

Table 3

Bivariate correlation between psychological distress and academic adjustment

<i>Psychological Distress</i>	<i>r</i>	<i>Significance Level</i>
Depression	-0.56	0.001
Generalized anxiety	-0.46	0.01
Social anxiety	-0.37	0.04
Eating Concerns	-0.35	0.05
Hostility	-0.26	0.17
Alcohol Use	-0.10	0.58

Chapter 5

Discussion, Conclusion, Recommendations

Discussion

The hypothesis advanced in this study that there is significant correlation between psychological distress and academic adjustment in college students was confirmed. That is, students who reported mental health problems in depression, anxiety, and eating concerns were more likely to experience academic adjustment concerns. Depression seems to play a huge role on academic adjustment. According to Deroma et al. (2009), many students identify their sense of self-worth, within their grades and consequently, lower grades can threaten the students sense of self-esteem, thereby causing them to feel depressed. Based on this proposition, the importance of not only GPA, but the overall transitioning process into a collegiate experience is paramount for researchers to take into account when linking mental health problems and academic achievement of students.

Generalized anxiety can also impact academic adjustment of students. Consistent with Hartman et al. (2017), students who have difficulties managing anxieties can have issues in setting long term academic goals. This is perhaps the reason why they perform worse than their normally functioning peers. Hartman's et al. (2017) research on students with high rates of emotional deregulation and text anxiety showed that students scored lower on achievement tests.

Eating concerns were also found to be associated with academic adjustment problems, which is consisted in the study of Yanover & Thompson (2008) that reported students with eating disorders were found to have lower levels of academic achievement.

Unfortunately, very little research has been done that examines eating concerns and its effects on academic achievement.

Conclusion

Based on the findings of this study, psychological distress contributes significantly to academic adjustment problems of college students. Results of this study can have implications for counseling centers in colleges and universities to provide early intervention and prevention programs to students' mental health well-being so that can improve their knowledge and skills to become more resilient in facing academic difficulties.

Recommendations

Finding of this study was based on a very small sample size of 31 students. Future studies can replicate this study by employing larger and more diverse sample size. The diversity of sample size can allow researchers to examine possible demographic factors that can moderate the relationship between psychological distress and academic adjustment.

As mentioned previously, the AAS was originally validated for use with sojourn students. This study considered the potential of AAS to be used in research involving college students in the US. Thus, future research can address validating the AAS with US college students.

This study utilized a cross-sectional research design in investigating the relationship of psychological distress and academic adjustment. Future research can employ a longitudinal design to determine the trend of the relationship of the variables over time.

Eating concerns as a psychological issue has not be explored quite frequently in research among college students. More studies on eating concerns can be conducted especially so that this study has reported significant impact of eating concerns on academic adjustment of college students.

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